



National Park Service
U.S. Department of the Interior
Hubbell Trading Post National Historic Site
Ganado, Arizona

Construction of a Museum Storage Facility Environmental Assessment/Assessment of Effect

April 2003



Photo: John L. Hubbell seated in a chair along the west wall of the Hubbell home, taken circa 1914 by Adam Clark Vroman

Construction of a Museum Storage Facility

Environmental Assessment/Assessment of Effect

Summary

The National Park Service proposes to construct a new museum storage facility at Hubbell Trading Post National Historic Site to house nearly 66,000 artifacts associated with the historic trading post and Hubbell homestead. These items are currently being stored in various inadequate facilities around the National Historic Site that have insufficient or no lighting, lack of fire suppression mechanisms, and no climate controls. These poor conditions have resulted in artifact deterioration, and have made routine inventory, examination, and preservation of the collection difficult to achieve.

To minimize the deterioration of artifacts, and to consolidate the collection, the National Park Service proposes to construct a roughly 5,500 square-foot, one-story museum storage facility in the developed zone of the National Historic Site, outside of the historic district. The building will provide sufficient storage space for the collection, in addition to employee offices and a laboratory. The new facility will also be equipped with climate controls to reduce artifact deterioration and a security system to aid in theft prevention. Following construction of the museum storage facility, the artifacts will be relocated to the new building (except for those on display at the Hubbell home, trading post, barn, and in the barnyard), where National Historic Site staff will strive to inventory, examine, clean, and restore the collection, as needed.

This Environmental Assessment/Assessment of Effect has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision-making framework that 1) analyzes a reasonable range of alternatives to meet project objectives, 2) evaluates potential issues and impacts to National Historic Site resources and values, and 3) identifies mitigation measures to lessen the degree or extent of these impacts. Resource topics that have been addressed in this document because the impacts associated with this project will be greater-than-negligible include historic sites; cultural landscapes; museum collections; park operations; visitor use and experience; and visual resources. All other resource topics have been dismissed because the project will result in negligible effects to those resources. No major effects are anticipated as a result of this project. Public scoping was conducted for this project and one comment was received.

Public Comment

If you wish to comment on the Environmental Assessment/Assessment of Effect, you may mail comments to the name and address below. This Environmental Assessment/Assessment of Effect will be on public review for 30 days beginning April 30th and ending May 30th, 2003. Please note that names and addresses of people who comment become part of the public record. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety. **If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment.**

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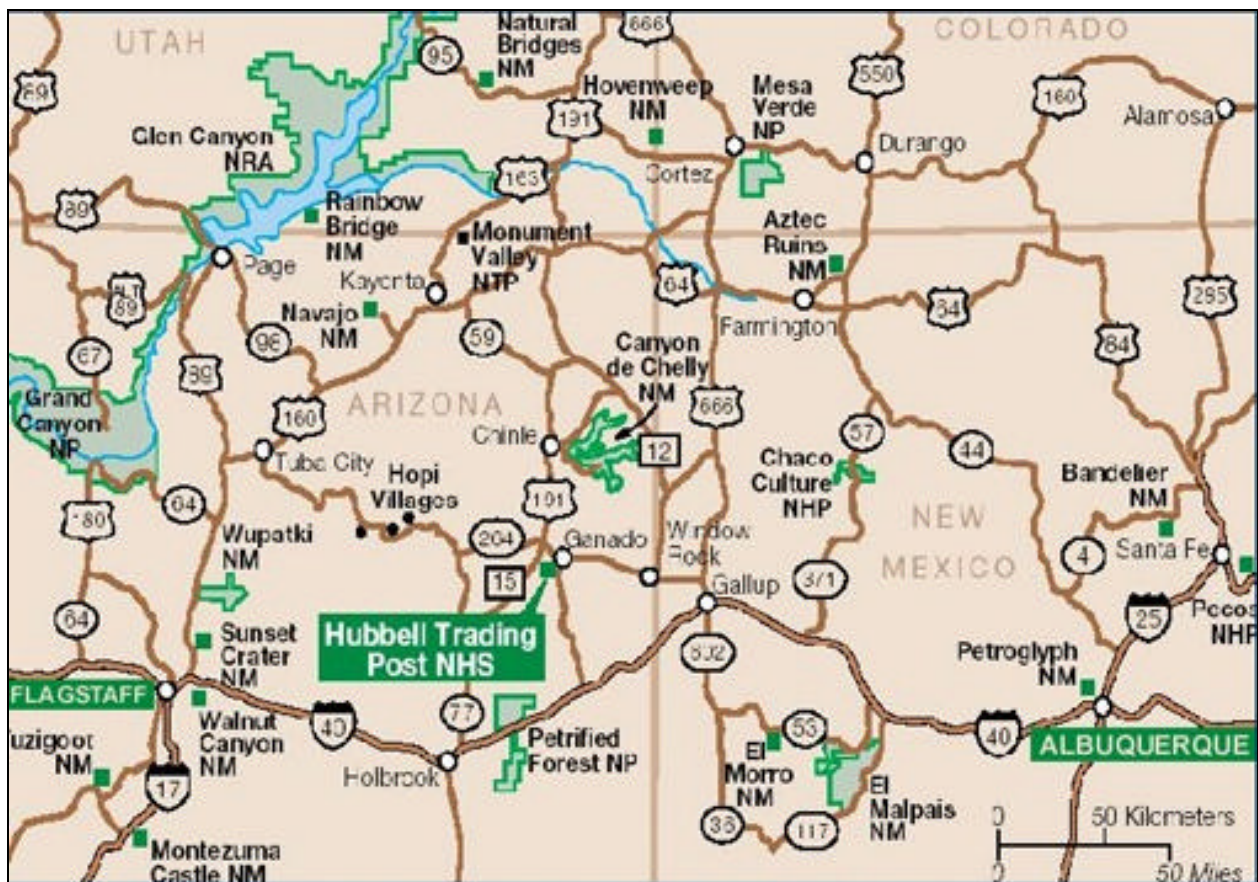
PURPOSE AND NEED

Introduction

Hubbell Trading Post National Historic Site is located in northeast Arizona on the Navajo Nation, approximately one mile west of Ganado, Arizona and 55 miles northwest of Gallup, New Mexico (see Figure 1). This National Historic Site was established by Congress on August 28, 1965 to preserve and protect the historic trading post and its environs for the benefit and enjoyment of the public. The National Historic Site includes the trading post and 160-acre homestead that were originally established by John Lorenzo Hubbell in 1878. Today, the National Park Service maintains operation of the trading post, which is an active community institution serving the economic, social, traditional, and educational needs of Navajo citizens and park visitors.

During the original operation of the trading post, John L. Hubbell and his family amassed a collection of over 66,000 historic objects. These historic objects contribute to the significance of the trading post. The majority of the collection is currently stored at the National Historic Site; however, the current storage conditions for the collection are not adequate. To address more appropriate storage solutions for the historic collection, Hubbell Trading Post National Historic Site proposes to construct a new museum storage facility. The purpose of this Environmental Assessment/ Assessment of Effect is to examine the environmental impacts associated with the proposal to improve the storage of the museum collections at Hubbell Trading Post National Historic Site.

Figure 1 – Location of Hubbell Trading Post National Historic Site



Purpose

The purpose of the project is to 1) meet the goals and objectives outlined in existing plans and policies, and 2) meet the recommendation of the regional director to complete this action as a 20% Fee Demonstration Project. Both of these goals are described in more detail below:

1. **Meet the Goals and Objectives in Existing Plans and Policies:** A number of National Park Service plans and policies recognize the fundamental importance of museum collections, and provide general direction and purpose for the proposed project. Other National Park Service plans more specifically acknowledge the need to improve the storage conditions of the museum collections at Hubbell Trading Post National Historic Site. Together, these plans and policies include the *2001 National Park Service Management Policies*, *2001-2005 Strategic Plan*, the *1986 Statement for Management*, the *1980 Development Concept Plan*, the *1979 Assessment of Alternatives for Development Concept Plan*, the *1975 Collection Management Plan*, and the *1969 Master Plan*. Following is a brief description of the goals and objectives outlined in these plans and policies that relate to the proposed project.

2001 National Park Service Management Policies: The *2001 National Park Service Management Policies* provides a general framework of policies for managing the national park system (NPS 2000). In this plan, *Section 5.3.1 Protection and Preservation of Cultural Resources* states that the National Park Service will protect cultural resources against theft, fire, vandalism, overuse, deterioration, environmental impacts, and other threats, without compromising the integrity of the resources. More specifically, *Section 5.3.1.2 Fire Detection, Suppression, and Post-fire Rehabilitation and Protection* states that adequate fire detection, warning, and suppression systems will be installed to protect museum or library collections. Per *Section 5.3.5.5 Museum Collections*, the National Park Service will protect, preserve, and provide access to objects and collections to aid understanding among park visitors, and to advance knowledge in the humanities and sciences.

2001-2005 Strategic Plan: The *2001-2005 Strategic Plan* identifies the mission and goals of Hubbell Trading Post National Historic Site. The following statements excerpted from this plan demonstrate the significance of the cultural resources, including the museum collections, at Hubbell Trading Post National Historic Site (NPS 2000a):

- Is one of the few remaining, continuously operating trading posts representing what was once a common yet significant establishment and form of commerce in the southwestern United States.
- Continues to be a crossroads of cultures, a medium for cultural transfer, an interface for the arts, and site of hospitality, education, communication, and diversity.
- Commemorates the traditional and distinctive role of the 'Indian trader' in the American southwest as an agent of change influencing economic development and introducing new technology, serving as a focal point for political, financial, and social activity, and guiding and encouraging the expression of Native American authentic arts and crafts.
- Retains integrity of the trading post operation which includes its museum collection, cultural landscape, buildings, and a nearly continuous archival documentation of its use since the 1870s and is unequalled anywhere.
- Is recognized as a National Historic Landmark for its long and rich history of diverse human settlement evidenced by significant archeological ruins and scatters, and the wealth and abundance of its historic resource and cultural heritage.

1986 Statement for Management: The *1986 Statement for Management* for Hubbell Trading Post National Historic Site identifies problems associated with current artifact storage, including insufficient space for both the artifacts and the National Historic Site staff who work with the artifacts. The plan also alludes to problems associated with artifacts being stored in various sheds and outbuildings, and the poor conditions of these buildings that could result in the loss of irreplaceable objects and part of the history of the site (NPS 1986). To minimize damage to the historic objects, the plan recommends a curatorial storage building, constructed with appropriate climate controls, storage space, and administrative offices. In addition to these statements, several management objectives outlined in the *Statement for Management* directly relate to the potential construction of a curatorial facility, including goals to:

- Provide the necessary storage, cataloging, and curatorial services for the Hubbell collection.
- Ensure the protection of prehistoric and historic resources.
- Develop informative, accurate interpretive programs based on historical research about J.L. Hubbell and his family, the effect that they and the trading post had upon the Navajo people, and the history of the trading post as a business.
- Provide a range of interpretive experiences including the basic concepts of the national historical site to in-depth interpretation.
- Provide interpretation from the Navajo perspective.
- Increase space for visitor center services.

- Provide adequate work and storage space for maintenance facilities and equipment.

1980 Development Concept Plan and the 1979 Assessment of Alternatives for Development Concept Plan: The *1980 Development Concept Plan* and the *1979 Assessment of Alternatives for Development Concept Plan* also state the need for on-site storage for historic materials, specifically a collections storage and laboratory (NPS 1980 and NPS 1979).

1975 Collection Management Plan and the 1969 Master Plan: The *1975 Collection Management Plan* and the *1969 Master Plan* identify the problems associated with the current storage of the museum collections, particularly the deterioration of artifacts. These two plans recommend that a solution be investigated, and that this solution consider security and fire protection for the collection. These plans also identify the need for cleaning, cataloguing, and repairing pieces of the collection.

2. Meet the recommendation of the regional director to complete this action as a 20% Fee Demonstration

Project: Hubbell Trading Post National Historic Site was selected as the number two priority in the Intermountain Regional Director's Office to receive a 20% Fee Demo Program funding for the purposes of constructing a museum storage facility at the National Historic Site, as based on the following factors:

- The entire museum collection, including an extensive archival collection and the contents of the historic buildings are original to the site, and are essential to preserving and interpreting the historic and cultural landscape which was legislatively designated by Congress. In addition, the collection is important to the Navajo Nation.
- The National Historic Site has a permanent full-time curatorial staff, (and has for over 25 years), due to the recognized significance and value (both historic and monetary) of the National Historic Site's museum collections and the park staff's past and current commitment to the preservation and use of the resources.
- The National Historic Site has an established program to assist both National Park Service staff and non-National Park Service researchers to access and utilize the collection for the purposes of researching and preserving the site's historic structures and interpreting the role of the trading post in Navajo culture and southwestern history.
- The National Historic Site's remote location, the size, value, and fragile nature of the collection, and lack of other nearby parks and/or museum partners precludes the National Historic Site from sharing or transferring its collection to another park, National Park Service repository/center, or similar institution.

Need

The *2001 Planning and Value Analysis Study for a Museum Storage Facility* describes the existing facilities where the collection of approximately 66,000 historic objects is stored. This report also describes the condition of these facilities, and proposes alternatives for minimizing the problems associated with the current artifact storage (NPS 2001).

Per this report, the museum collection at Hubbell Trading Post National Historic Site has far outgrown the storage capacity of the current facilities. The collection is currently divided up into approximately ten different buildings, all of which are historic outbuildings (barns, sheds, cellars, etc.) associated with the historic trading post and homestead. The condition of these buildings has been rated poor to fair for a number of reasons, the primary reason being inadequate storage space. In addition, these buildings are not equipped with proper shelving/storage equipment, environmental climate controls, a fire protection system, or an intrusion detection system. These buildings also pose health hazards due to their unsafe entrances, dirt floors, risk of Hanta Virus, tight quarters, rodents/insects, and lack of lighting. The current facilities do not accommodate the access requirements per the Americans with Disabilities Act (ADA), nor do the facilities provide space to conduct artifact inventory, cleaning, restoration, examination, research, or preservation.

Project Objectives

Based on the Purpose and Need for the project and the scoping conducted with both the public and park staff, the following objectives have been identified for implementation of a museum storage facility. The overall goal of the project is to improve the level of the collections care, preservation, and use. Specific objectives to meet this goal include:

1. Provide appropriate, adequate, and consolidated storage of museum objects;
2. Maintain the collection in close proximity to the National Historic Site to facilitate convenient artifact supervision research, preservation, loaning, and curation by park staff;
3. Provide a safer environment for park employees who handle the collection;
4. Provide work/study spaces for research, cleaning, preservation, restoration, or other curatorial duties; and
5. Encourage increased artifact understanding, knowledge, and interpretation of the collection.

Public Scoping

Scoping is a process to identify the resources that may be affected by a project proposal, and to explore the possible alternative ways of achieving the proposal while minimizing adverse impacts. Hubbell Trading Post National Historic Site conducted both internal scoping with appropriate NPS staff and external scoping with the public and interested and affected groups and agencies.

Internal scoping was conducted by an interdisciplinary team of professionals from Hubbell Trading Post National Historic Site and the Intermountain Support Office in Denver. Interdisciplinary team members met on July 24, 2002 to discuss the purpose and need for the project; various alternatives; potential environmental impacts; past, present, and reasonably foreseeable projects that may have cumulative effects; and possible mitigation measures. The team also conducted a site visit to view the conditions of the existing museum collections and to evaluate some proposed sites for a museum storage facility.

During this initial project scoping phase, various agencies and the public were contacted for input regarding potential issues and concerns related to constructing a museum storage facility at Hubbell Trading Post National Historic Site. A public scoping press release dated August 28, 2002 was mailed to interested and affected parties on the National Historic Site's mailing list. The National Park Service provided notification to the general public by mailing the press release to local newspapers. During the 30-day scoping period, one comment was received which stated general support for the construction of a museum storage facility. More information regarding scoping can be found in *Chapter 5.0 Comments and Coordination*.

Impact Topics Carried forward for Further Analysis

Impact topics for this project have been identified on the basis of federal laws, regulations, and orders; National Park Service *2001 Management Policies*; and National Park Service knowledge of resources at Hubbell Trading Post National Historic Site. Impact topics that are carried forward for further analysis in this Environmental Assessment/Assessment of Effect are listed below along with the reasons for which the impact topic is further analyzed.

Cultural Resources

Section 106 of the National Historic Preservation Act, as amended in 1992 (16 USC 470 *et seq.*); the National Park Service's Director's Order #28 *Cultural Resource Management Guideline*; and National Park Service *2001 Management Policies* (NPS 2000b) require the consideration of impacts on historic properties that are listed on or eligible to be listed on the National Register of Historic Places. The National Register is the nation's inventory of historic places and the national repository of documentation on property types and their significance. The above-mentioned policies and regulations require federal agencies to coordinate consultation with State Historic Preservation Officers regarding the potential effects to properties listed on or eligible for the National Register of Historic Places.

The National Park Service, as steward of many of America's most important cultural resources, is charged to preserve historic properties for the enjoyment of present and future generations. Management decisions and activities throughout the National Park System must reflect awareness of the irreplaceable nature of these resources. The National Park Service will protect and manage cultural resources in its custody through effective research, planning, and stewardship and in accordance with the policies and principles contained in the *2001 Management Policies* and the appropriate Director's Orders.

For the purposes of the following discussion, cultural resources include archeological resources, historic sites, cultural landscapes, ethnographic resources, and museum collections. The topics of historic sites, cultural landscapes, and museum collections have been carried forward for further analysis, as described below. The topics of archeological sites and ethnographic resources have been dismissed, as discussed in the following section *Impact Topics Dismissed from Further Analysis*.

Historic Sites

Hubbell Trading Post was designated as a National Historic Landmark on December 20, 1960 (NPS 1989, 1961, & 1958, Uteley 1959). National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. All National Historic Landmarks are listed on the National Register of Historic Places. Therefore, because the proposed construction of the museum storage facility will take place within the boundaries of the Hubbell Trading Post National Historic Site which is a National Historic Landmark, this topic has been carried forward as an impact topic in this Environmental Assessment/ Assessment of Effect.

Cultural Landscapes

According to the National Park Service's Director's Order #28 *Cultural Resource Management Guideline*, a cultural landscape is a reflection of human adaptation and use of natural resources, and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. A cultural landscape report and an inventory of Hubbell Trading Post National Historic Site were conducted by the National Park Service (NPS 1998 and NPS 2003). These reports concluded that the cultural landscape at Hubbell Trading Post National Historic Site is eligible for the National Register of Historic Places, and should be considered a contributing element to the National Historic Landmark status. Therefore, because the project will occur within the cultural landscape which is an important part of the National Historic Landmark, the topic of cultural landscapes will be addressed in this Environmental Assessment/ Assessment of Effect.

Museum Collections

According to Director's Order #24 *Museum Collections*, the National Park Service requires the consideration of impacts on museum collections (historic artifacts, natural specimens, and archival and manuscript material), and provides further policy guidance, standards, and requirements for preserving, protecting, documenting, and providing access to, and use of, National Park Service museum collections. Currently, the collection at Hubbell Trading Post National Historic Site is stored in substandard conditions at the park that promote artifact deterioration and prevent proper curation of the artifacts. The proposed project is expected to have a long-term, beneficial effect on the collection, particularly in terms of artifact preservation. Therefore, the topic of museum collections will be addressed in this Environmental Assessment/ Assessment of Effect.

Park Operations

Construction of the museum storage facility will improve access to the collection, and will make it easier and safer for park staff to protect, preserve, inventory, and otherwise maintain the condition of the artifact collection. Other changes associated with the proposed action include additional maintenance that is required for a new building; office location changes for the curator and his/her assistants; and relocation of the collection to the new facility following construction. Because these changes will have a measurable effect on the curator, the museum technician, and the maintenance crew, the topic of park operations has been carried forward for further analysis.

Visitor Use and Experience

According to *2001 Management Policies*, the enjoyment of park resources and values by people is part of the fundamental purpose of all parks. The National Park Service is committed to providing appropriate, high quality opportunities for visitors to enjoy the parks, and will maintain within the parks an atmosphere that is open, inviting, and accessible to every segment of society. Further, the National Park Service will provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in the parks.

Although the proposed museum storage facility would not be open to the general public, visitors would benefit from increased understanding of the museum collection; additional space in the historic buildings which could be used for interpretation; and enhanced circulation of certain artifacts from the collection. Researchers would also be able to access the majority of the collection in one location that is clean, organized, and provides ample space to study the artifacts. Therefore, because the general public and researchers would benefit in the long-term from construction of a museum storage facility, the topic of visitor use and experience has been carried forward for further analysis.

Visual Resources

According to *2001 Management Policies*, the National Park Service strives to understand, maintain, restore, and protect the inherent integrity of the natural resources, processes, systems, and values of the parks. Scenic views and visual resources are considered highly valued associated characteristics that the National Park Service should strive to protect. The proposed location for the museum storage facility is on an already disturbed parcel of land in the developed zone of the National Historic Site. The museum storage facility will not be located in the viewshed of the historic district, but it will be directly located within view of approximately two or three National Historic Site residences, the maintenance building, the National Historic Site entrance road, and Navajo Route 3 (State Highway 264). Because the construction of a new building will change the viewshed in the long-term for persons who use these structures and roads, particularly the residences, the topic of visual resources has been carried forward for further analysis.

Impact Topics Dismissed From Further Analysis

Some impact topics have been dismissed from further consideration, as listed below. The rationale for dismissing these specific topics is stated for each resource.

Topography, Geology, and Soils

According to the National Park Service's *2001 Management Policies*, the National Park Service will preserve and protect geologic resources and features from adverse effects of human activity, while allowing natural processes to continue (NPS 2000b). Hubbell Trading Post National Historic Site is comprised of 160 acres of land that lies in a shallow valley adjacent to the Pueblo Colorado Wash. Low level sandstone buttes and mesas surround the site, which sits primarily on an upland terrace adjacent to the Pueblo Colorado Wash (NPS 1980). The proposed location for the museum storage facility is predominately flat, with no substantial topographic or geologic features. The proposed action would not change the existing topography of the area or the geologic features. Therefore, because the project would result in negligible effects to topography and geology, these two topics have been dismissed.

According to the National Park Service's *2001 Management Policies*, the National Park Service will strive to understand and preserve the soil resources of park units and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources (NPS 2000b). The soils of Hubbell Trading Post National Historic Site include clays, sandy clay loam, and sandy loam (NPS 1980). Most are deep and dry, with an alluvium parent material. The soil has moderate permeability and runoff is slow. The soils in the project area have been disturbed over the years by farming activities conducted by the Hubbell family in addition to developing this area for residences, storage, and maintenance for the National Historic Site in recent times. Construction activities for the museum storage facility will include intrusive and soil-disturbing activities such as grading, foundation-setting, and trenching for utilities. However, because these activities will be conducted on soils that have been previously disturbed, the effect is considered to be negligible. For this reason, the topic of soils has been dismissed.

Vegetation

According to the National Park Service's *2001 Management Policies*, the National Park Service strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of plants (NPS 2000b). The vegetation present at Hubbell Trading Post National Historic Site is classified as 'Great Basin Microphyll Desert', which includes natural vegetation communities such as pinon-juniper, greasewood-fourwing, saltbush, sage brush, and rabbit brush in addition to several introduced or exotic species including Russian-olive, currant, apple, and alfalfa to name a few (NPS 1998). The immediate project area is located in the developed zone of Hubbell Trading Post National Historic Site, and contains little to no vegetation because it has been previously disturbed. The proposed staging area adjacent to the east side of the project area contains little to no vegetation as well, except for a few bushes and small trees, which would be avoided during construction. No rare or unusual vegetation occurs in the immediate project area.

Any ground disturbance activities can increase the potential for noxious weeds and/or exotic species to be introduced in the area of disturbance. Construction of the proposed museum storage facility at Hubbell Trading Post National Historic Site will involve ground disturbance in the immediate vicinity of and directly adjacent to the new building. The dirt lot adjacent to the new museum storage facility will likely be used for construction staging, and will be disturbed from material stockpiling or other construction activities. The National Park Service and Hubbell Trading Post National Historic Site strive to minimize ground disturbing activities to the extent possible. Mitigation measures have been established for revegetation of the areas that will be disturbed by this project, as described in *Chapter 2.0 Alternatives Considered*. Due to the limited size and extent of the ground disturbance proposed for this project; the fact that the project area is located within the developed zone of the National

Historic Site which contains little to no vegetation; and the adherence to mitigation measures developed for noxious weeds, exotic vegetation, and plant restoration; the project will result in negligible impacts to vegetation, and therefore this topic was dismissed from further analysis.

Wildlife

According to the National Park Service's *2001 Management Policies*, the National Park Service strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of animals (NPS 2000b). The National Park Service Inventory and Monitoring Program maintains a database of information pertaining to the wildlife at Hubbell Trading Post National Historic Site. The majority of this information was updated from surveys conducted at the National Historic Site in 2002 (NPS 2002). Some mammalian wildlife species at Hubbell Trading Post National Historic Site include coyote, fox, raccoon, skunk, porcupine, mice, gophers, prairie dogs, bats, chipmunks, and rabbits. Common bird species present at the National Historic Site include ravens, swallows, kestrels, hummingbirds, robins, roadrunners, sparrows, hawks, doves, and vultures. Reptiles and amphibians including lizards, toads, frogs, turtles, and snakes also occur at the National Historic Site.

The location of the proposed museum storage facility is in the developed zone of Hubbell Trading Post National Historic Site. The developed zone of the National Historic Site generally precludes or limits wildlife habitat and wildlife occurrences due to the presence of humans, human-related activities, and structures that have removed or displaced native wildlife habitat. In addition, the immediate location of the proposed museum storage facility has been previously disturbed; contains little to no vegetation or water; and is generally flat with no major geologic features. For these reasons, the immediate project area provides habitat to very few wildlife species. During construction, noise will likely increase which may disturb wildlife in the general area. Construction-related noise will be temporary, and existing sound conditions will resume following construction activities. Because construction of the proposed museum storage facility will occur in a previously disturbed area in the developed zone of the National Historic Site where occurrences of wildlife are infrequent, and construction-related noise will be temporary, the project will result in negligible impacts to wildlife, and therefore this topic has been dismissed.

Threatened, Endangered, and Candidate Species, and Species of Special Concern

The Endangered Species Act of 1973 requires examination of impacts on all federally-listed threatened, endangered, and candidate species. Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service (or designated representative) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. In addition, the *2001 Management Policies* and Director's Order #77 *Natural Resources Management Guidelines* require the National Park Service to examine the impacts on federal candidate species, as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species (NPS 2000b). For the purposes of this analysis, the Navajo Nation Department of Fish and Wildlife was contacted with regards to federally- and state-listed species to determine those species that could potentially occur at Hubbell Trading Post National Historic Site (NNDFWL 2002).

Discussions with the Navajo Nation Department of Fish and Wildlife verified that there is no record of species of concern occurring at the proposed location for the museum storage facility (NNDFWL 2002). This was concurred in a letter from the Navajo Nation Department of Fish and Wildlife dated January 8, 2002.

Although no species of concern are known to occur in the specific project area, the Navajo Nation Department of Fish and Wildlife pointed out that eight species of concern occur within the broader area, as based on coarse habitat characteristics and species range information. These eight species include Black-footed Ferret (*Mustela nigripes*), Northern Leopard Frog (*Rana pipiens*), Southwestern Willow Flycatcher (*Empidonax trailii extimus*), Golden Eagle (*Aquila chrysaetos*), Ferruginous Hawk (*Buteo regalis*), Bald Eagle (*Haliaeetus leucocephalus*), Mountain Plover (*Charadrius montanus*), and Peregrine Falcon (*Falco peregrinus*). Because these species are known to occur in the broader area, the Navajo Nation Department of Fish and Wildlife recommended that the National Park Service verify the presence of these species in the project area. None of these species are known to occur in the proposed project location, and this location does not contain suitable habitat for these species due to its disturbed condition and lack of vegetation and water.

Further protection under the Migratory Bird Treaty Act makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. In addition, this act serves to protect environmental conditions for migratory birds from pollution or other ecosystem degradations. The above-listed bird species including southwestern willow flycatcher, golden and bald eagles, ferruginous hawk, mountain plover, and peregrine falcon range over large areas of the region and are potential transients in the National Historic Site. However, there are no known nesting sites in the National Historic Site, and park lands are not vital for foraging or roosting. Further, observations during a survey for southwestern willow flycatcher conducted in spring and summer of 2002 indicated no nesting, breeding, or territorial behavior for southwestern willow flycatcher along the Pueblo Colorado Wash within the National Historic Site (ESM 2002). Construction-related noise could potentially disturb transient bird species, but these adverse impacts would be 1) temporary, lasting only as long as construction, and 2) negligible, because suitable habitat for transient birds is found throughout the region.

Because no threatened, endangered, or other species of concern are known to occur in the project area, the topic of threatened and endangered species was dismissed from further analysis.

Water Resources

National Park Service policies require protection of water quality consistent with the Clean Water Act. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters". To enact this goal, the U.S. Army Corps of Engineers has been charged with evaluating federal actions that result in potential degradation of waters of the United States and issuing permits for actions consistent with the Clean Water Act. The U.S. Environmental

Protection Agency also has responsibility for oversight and review of permits and actions, which affect waters of the United States.

Hubbell Trading Post National Historic Site is located adjacent to the Pueblo Colorado Wash. Much of the National Historic Site has been overgrazed in the past, resulting in problems with erosion. Over the years, erosion control measures have been taken, but with the dry, loose nature of the soils in addition to periodic flooding events, erosion along the Pueblo Colorado Wash continues to be problem. Construction of the museum storage facility will occur approximately 200-300 feet south of the Pueblo Colorado Wash, and approximately 25-50 feet east of a small, unnamed drainage/swale that follows the contours behind the east side of the residential area. This unnamed drainage/swale is probably man-made, and is likely to have been constructed during development of the residential area. It is mostly dry, except for periodic runoff during storm events.

The area of the building's footprint (approximately 5,500 square feet) will increase the amount of impervious surface in the area by that much, which could possibly increase the erosion potential of the area. The small, unnamed drainage/swale behind the museum storage facility will serve to collect runoff and carry it to the Pueblo Colorado Wash. Contouring of this drainage/swale during construction may be necessary to ensure proper drainage from the site. Because this drainage/swale will serve as a water collection system, the potential for increased erosion from additional impervious surface area is minimized, and the project will result in negligible effects to erosion and water quality in the Pueblo Colorado Wash.

Drinking water supplies for the National Historic Site and the majority of the Navajo Nation are maintained by the Navajo Tribal Utility Authority. The proposed project will use water during construction of the project and for the life of the museum storage facility. However, the amount of water needed to support this building is minimal, and will have negligible effects on the drinking water supplies in the area.

The Ganado irrigation system supports numerous irrigation fields in the general area, however the original irrigation system which was built by John Hubbell is currently not in use. The proposed project will not disturb or alter any irrigation ditches (within or outside the National Historic Site), thereby resulting in negligible effects on the irrigation system.

To further assist with erosion and water quality, the areas immediately adjacent to the proposed building will not be surfaced/paved or paved, and some of the areas will be landscaped/revegetated following construction. Because the project results in negligible effects to water quality, and will not directly impact the Pueblo Colorado Wash, the topic of water resources has been dismissed.

Wetlands

For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

Executive Order 11990 *Protection of Wetlands* requires federal agencies to avoid, where possible, adversely impacting wetlands. Further, Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to prohibit or regulate, through a permitting process, discharge or dredged or fill material or excavation within waters of the United States. National Park Service policies for wetlands as stated in *2001 Management Policies* and Director's Order #77-1 *Wetlands Protection*, strive to prevent the loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. In accordance with DO #77-1 *Wetlands Protection*, proposed actions that have the potential to adversely impact wetlands must be addressed in a Statement of Findings for wetlands.

The proposed location for the museum storage facility is a previously-disturbed, open dirt lot with little vegetation. No wetlands exist in the proposed location for the museum storage facility. Therefore, because impacts to wetlands from this project would be negligible, a Statement of Findings for wetlands will not be prepared, and the impact topic of wetlands has been dismissed.

Floodplains

Executive Order 11988 *Floodplain Management* requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternative exists. The National Park Service under *2001 Management Policies* and Director's Order #77-2 *Floodplain Management* will strive to preserve floodplain values and minimize hazardous floodplain conditions. According to Director's Order #77-2 *Floodplain Management*, certain construction within a 100-year floodplain requires preparation of a Statement of Findings for floodplains.

While the Pueblo Colorado Wash is dry for several months of the year, periodic intense monsoon rainfall causes flooding on the main stem and tributary washes. Much of Hubbell Trading Post National Historic Site is located on a terrace above these flood levels, including all of the National Historic Site's historic structures. The 100-year and 500-year floodplains were determined for Hubbell Trading Post National Historic Site by the Los Angeles District of the Corps of Engineers (NPS 1980). According to this data, the proposed location for the museum storage facility is located approximately 200-300 feet outside of the 100-year and 500-year floodplains for the Pueblo Colorado Wash. A *Soil Erosion Study* was conducted at the National Historic Site, which resulted in the same conclusions; that the proposed location for the museum storage facility is outside the 100-year and 500-year floodplains for the Pueblo Colorado Wash (NPS 1983). Therefore, because the project results in a negligible effect to floodplains, a Statement of Findings for floodplains will not be prepared, and the topic of floodplains has been dismissed.

Archeological Resources

In addition to the National Historic Preservation Act and the National Park Service *2001 Management Policies* (NPS 2000b), the National Park Service's Director's Order #33 *Archeology*, affirms a long-term commitment to the appropriate investigation, documentation, preservation, interpretation, and protection of archeological resources inside units of the National Park System.

As one of the principal stewards of America's heritage, the National Park Service is charged with the preservation of the commemorative, educational, scientific, and traditional cultural values of archeological resources for the benefit and enjoyment of present and future generations. Archeological resources are nonrenewable and irreplaceable, so it is important that all management decisions and activities throughout the National Park System reflect a commitment to the conservation of archeological resources as elements of our national heritage.

An intensive cultural resource survey of the proposed location for the museum storage facility was conducted in May 2002, and no archeological sites were identified in the immediate project area (Zimmerman 2002). The report identifies that archeological resources may be present adjacent to the project area, and/or subsurface cultural materials may exist in the project area. For these reasons, a professional cultural resource specialist will monitor all ground-disturbing activities related to construction of the museum storage facility. As described in *Mitigation Measures for the Action Alternative*, appropriate steps would be taken to protect any archeological resources that are inadvertently discovered during construction. Because the project will not disturb any known archeological sites, the effect of the project on archeological resources is expected to be negligible, and this topic has been dismissed from further analysis.

Ethnographic Resources

According to the National Park Service's Director's Order #28 *Cultural Resource Management* ethnographic resources are defined as any site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it, and the National Park Service should try to preserve these resources. Native American tribes traditionally associated with the lands of Hubbell Trading Post National Historic Site were apprised of the proposed project in a letter dated February 10, 2002 and a press release sent to them on August 28, 2002 (see *Comments and Coordination* chapter and Appendices A and B). One response letter was received from the Pueblo of Laguna, stating support for the construction of the museum storage facility.

The proposed project will involve some subsurface excavation, which has the potential to reveal ethnographic resources such as human remains, funerary objects, sacred objects, or other objects of cultural patrimony. However, it is unlikely that ethnographic resources would be affected by the project because of the previously disturbed nature of the project area, and the fact that no ethnographic resources were identified in the project area by affiliated tribes during project scoping. Because the project takes place within the boundaries of the Navajo Nation, the National Park Service will comply with established regulations and policies governing the construction of the museum storage facility within the Navajo Nation. To date, no special regulations, policies, or provisions of the Navajo Nation have been identified with regards to this project.

As described in *Mitigation Measures for the Action Alternative*, appropriate steps would be taken to protect any ethnographic resources that are inadvertently discovered. Copies of the Environmental Assessment/Assessment of Effect will be available for public review, including review by Native American tribes. If subsequent issues or concerns are identified, appropriate consultations would be undertaken. Because it is unlikely that ethnographic resources would be affected by the proposed project, and because appropriate steps would be taken to protect any ethnographic resources that are inadvertently discovered, the topic of ethnographic resources was dismissed from further consideration in the document.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by the Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources in Hubbell Trading Post National Historic Site. The lands comprising the National Historic Site are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, the project will have negligible effects on Indian trust resources, and this topic was dismissed as an impact topic.

Prime and Unique Farmlands

The Farmland Protection Policy Act of 1981, as amended, requires federal agencies to consider adverse effects to prime and unique farmlands that would result in the conversion of these lands to non-agricultural uses. Prime or unique farmland is classified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), and is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to the NRCS, the project area does not contain prime or unique farmlands (NRCS 2002). Therefore, the topic of prime and unique farmlands has been dismissed.

Air Quality

The Clean Air Act of 1963 (42 U.S.C. 7401 *et seq.*) was established to promote the public health and welfare by protecting and enhancing the nation's air quality. The act establishes specific programs that provide special protection for air resources and air quality related values associated with National Park Service units. Section 118 of the Clean Air Act requires a park unit to meet all federal, state, and local air pollution standards. Hubbell Trading Post National Historic Site is designated as a Class II air quality area under the Clean Air Act. A Class II designation indicates the maximum allowable increase in concentrations of pollutants over baseline concentrations of sulfur dioxide and particulate matter as specified in Section 163 of the Clean Air Act. Further, the Clean Air Act provides that the federal land manager has an affirmative responsibility to protect air quality related values (including visibility, plants, animals, soils, water quality, cultural resources, and visitor health) from adverse pollution impacts.

Construction activities such as hauling material, operating equipment, and transporting the collection from the historic district to the new storage building could result in temporary increases of vehicle exhaust, emissions, and fugitive dust in the general

project area. Any exhaust, emissions, and fugitive dust generated from construction activities related to the museum storage facility will be temporary and localized, and would likely dissipate rapidly because air stagnation at Hubbell Trading Post National Historic Site is rare. Overall, the project could result in a negligible degradation of local air quality, and such effects would be temporary, lasting only as long as construction. The Class II air quality designation for Hubbell Trading Post National Historic Site would not be affected by the proposal. Therefore, air quality was dismissed as an impact topic.

Soundscape Management

In accordance with *2001 Management Policies* and Director's Order #47 *Sound Preservation and Noise Management*, an important component of the National Park Service's mission is the preservation of natural soundscapes associated with national park units (NPS 2000b). Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sound considered acceptable varies among National Park Service units as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas.

The proposed location for the museum storage facility and all construction activity would occur in the developed zone of Hubbell Trading Post National Historic Site, where the new facility would be located to already-existing residential, maintenance, and storage structures. In the developed zone, the protection of a natural ambient soundscape and/or opportunity for visitors to experience natural sound environments is not an objective. Due to the National Historic Site's preservation and interpretation of historic cultural resources, and because the National Historic Site is within close proximity to Ganado and Navajo Route 3 (State Highway 264), visitors generally do not come to Hubbell Trading Post National Historic Site seeking the quieter, intermittent sounds of nature.

Existing sounds in the developed zone are generated from vehicular traffic (from vehicles in the developed zone and from vehicles on the highway adjacent to the National Historic Site), people, climate controls on the buildings, domestic animals such as dogs, some wildlife such as birds, and wind. Sound generated by the long-term operation of the museum storage facility may include climate controls on the building such as heating or air conditioning units; vehicles driven by National Historic Site staff and researchers; and people using the building. Because the area already contains man-made noises, the long-term operation of the building is not expected to appreciably increase the noise levels in the general area.

During construction, human-caused sounds will likely increase due to construction activities, equipment, vehicular traffic, and construction crews. Relocation of the collection may also temporarily increase the noise in both the developed zone and the historic district, if vehicles are used to transport the objects. Any sounds generated with construction would be temporary, lasting only as long as the construction activity is generating the sounds, and would negligibly impact visitor enjoyment of the National Historic Site. Because protection of a natural ambient soundscape and/or opportunity for visitors to experience natural sound environments is not an objective of Hubbell Trading Post National Historic Site, and any construction-related sounds would have adverse but short-term and negligible impacts on visitor enjoyment of the National Historic Site, soundscape management was dismissed as an impact topic.

Lightscape Management

In accordance with *2001 Management Policies*, the National Park Service strives to preserve natural ambient landscapes, which are natural resources and values that exist in the absence of human caused light (NPS 2000b). Hubbell Trading Post National Historic Site strives to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements. The National Historic Site also strives to ensure that all outdoor lighting is shielded to the maximum extent possible, to keep light on the intended subject and out of the night sky. The existing lightscape in the general project area includes lighting from the National Historic Site residences and from neighboring buildings on the Navajo Nation.

The proposed action may incorporate minimal exterior lighting and motion sensors for intrusion detection, but the lighting will be directed toward the intended subject with appropriate shielding mechanisms, and will be placed in only those areas where lighting is needed for safety reasons. The amount and extent of exterior lighting on the museum storage facility will have negligible effects on the existing outside lighting or natural night sky of the area; therefore, this topic has been dismissed.

Socioeconomic Environment

The proposed action would neither change local and regional land use nor appreciably impact local businesses or other agencies. Implementation of the proposed action could provide a negligible beneficial impact to the economies of nearby Ganado, Arizona, as well Apache County due to minimal increases in employment opportunities for the construction workforce and revenues for local businesses and governments generated from these additional construction activities and workers. Any increase in workforce and revenue, however, would be temporary and negligible, lasting only as long as construction. Therefore, because the impacts to the socioeconomic environment would be negligible, this topic has been dismissed.

Environmental Justice

Executive Order 12898 *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. Because the museum storage facility will be available for use by all researchers and park staff regardless of race or income, and the construction workforces will not be hired based on their race or income, the proposed action would not have disproportionate health or environmental effects on minorities or low-income populations or communities. Therefore, environmental justice has been dismissed as an impact topic in this document.

ALTERNATIVES CONSIDERED

Introduction

During the spring and summer of 2001, a team of NPS employees met on various occasions to conduct a *Planning and Value Analysis Study* for the purpose of developing project alternatives (NPS 2001). These meetings resulted in the definition of project objectives as described in the *Purpose and Need*, and a list of alternatives that could potentially meet these objectives. The team evaluated several alternative locations and building types for the museum storage facility (for more information see also *Consultation and Coordination*).

A total of seven action alternatives and the No Action Alternative were originally identified for this project. Of these, six of the action alternatives were dismissed from further consideration for various reasons, as described later in this chapter. One action alternative and the No Action Alternative are carried forward for further evaluation in this Environmental Assessment/Assessment of Effect. A summary table comparing alternative components is presented at the end of this chapter.

Alternatives Carried Forward

Alternative A – No Action Alternative

Under this alternative, the museum storage facility would not be constructed. The artifacts would remain in their present locations, which consist of approximately ten different historic buildings that do not have climate control, fire protection systems, or security systems, and some of which are also infected with mice that carry the Hanta Virus. The National Park Service employees in charge of curation of the artifacts would remain in their existing offices which are located near the historic trading post. Researchers would be required to locate and study the artifacts in their present locations. Should the No-Action Alternative be selected, the National Park Service would respond to future needs and conditions of the artifact storage without major actions or changes in present course of action.

Alternative B – Museum Storage Facility Located Adjacent to Maintenance Facility

This alternative consists of constructing a museum storage facility located in an already disturbed area roughly adjacent to the maintenance facility. Per the *Development Concept Plan*, the project area is located near the eastern boundary of the National Historic Site in the developed zone (NPS 1980). The developed zone contains the National Historic Site housing units (ten houses), two equipment storage sea crates, one modular unit for meeting space, and a prefabricated Bailey building used for maintenance.

Figures 2, 3 and 4 have been included to illustrate Alternative B. The approximate location of the museum storage facility in relation to the National Historic Site is shown on Figure 2. Figure 3 shows a close-up of the location of Alternative B as well as those alternatives that were dismissed from further consideration. Finally, Figure 4 shows the preliminary design for the new building. Following these figures is a description of the specific components related to construction of the museum storage facility under Alternative B.

Figure 2 – Location of Alternative B in Relation to Hubbell Trading Post National Historic Site

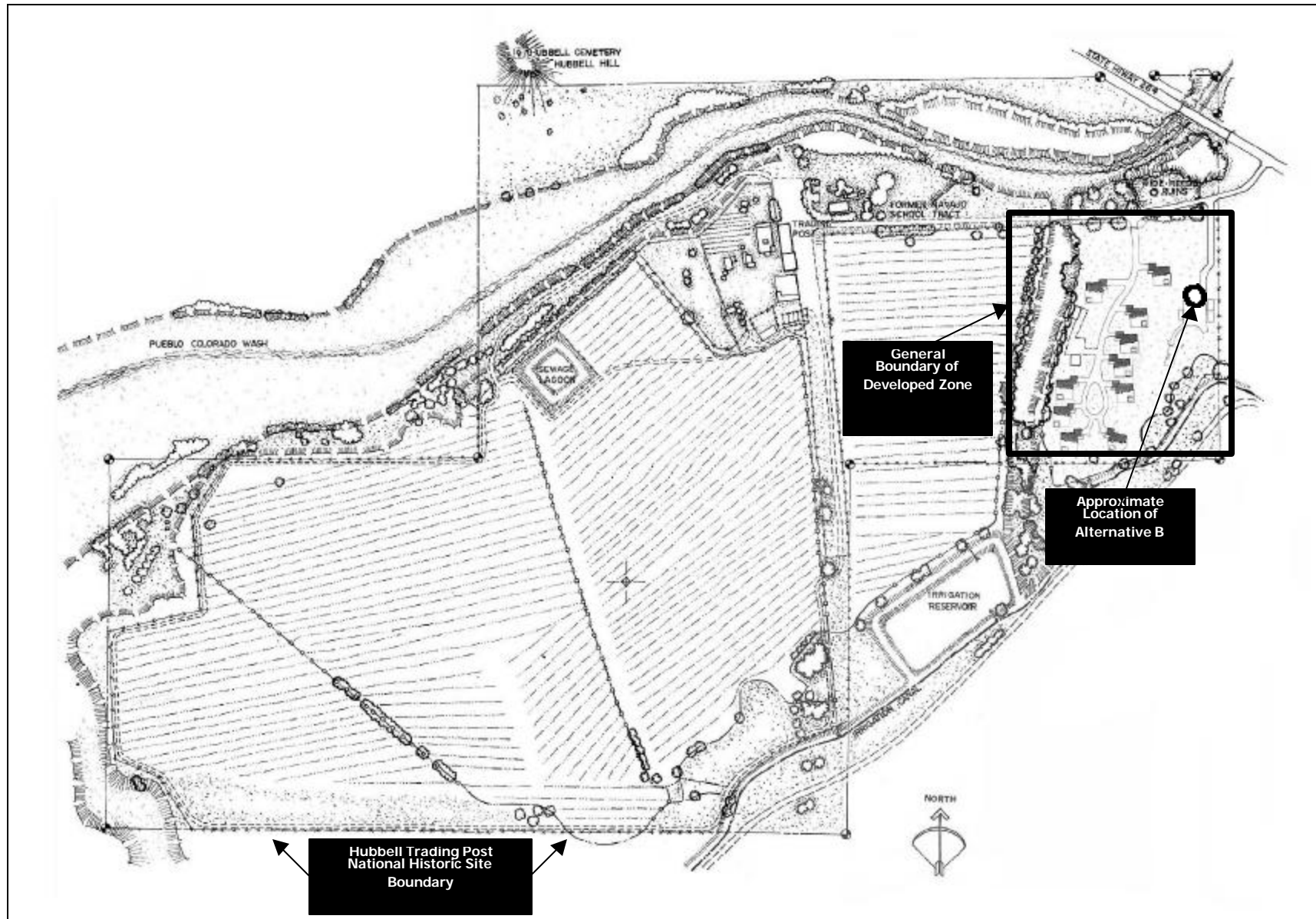
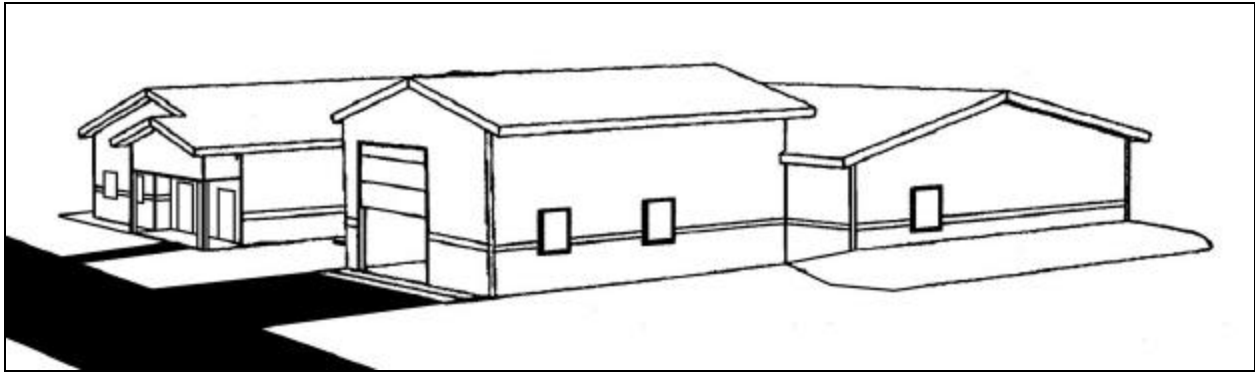


Figure 4 – Preliminary Design for the Museum Storage Facility

The following text further describes the components of Alternative B:

- Use/Operation of the Facility** - The museum storage facility will primarily be used by employees of the National Historic Site, particularly those few employees related to curation of the artifacts. Offices for these few employees will be established in the museum storage facility, which will serve as their permanent offices. The National Historic Site's maintenance crew will maintain the interior and exterior of the facility and grounds. Other National Historic Site employees will have access to the building, as needed. Researchers will be allowed to visit/use the museum storage facility during normal operating hours, upon request. The museum storage facility will not be open to the general public, except by special request, for which the visitors will be guided around the facility by a National Historic Site employee.
- Building Features** - The museum storage facility will be a one-story building, approximately 5,500 square feet in size. The dimensions of the building are roughly 98 feet long by 68 feet wide. The interior of the museum storage facility will include space for general artifact storage, archive storage, and possibly wagon storage, in addition to offices, a laboratory, janitorial storage, toilets, and possibly a loading dock. The exterior of building will be constructed to resemble the residences located nearby. The entire building will also be handicapped accessible.
- Utilities** - The building will be served by existing utilities located near the site, including water, sewer, electric, and gas. Connecting these existing utilities to the museum storage facility will likely entail the placement of additional underground piping to connect with these utilities.
- Other Features** - The museum storage facility will be equipped with a modern climate control system, which will include heating, ventilation, and air conditioning (HVAC). Humidity controls may also be installed for proper preservation of the artifacts. A security system will be installed to protect the artifacts from unauthorized entry, in addition to a fire protection system for the entire building, which will consist of smoke and heat detection alarms and sprinklers.
- Access** - Access to the museum storage facility would be from an already existing paved road that is currently used to access the maintenance facility, well house, and storage units. This access road joins the primary National Historic Site entrance road, and would be the first left for anyone entering the National Historic Site. Access to this road is currently restricted by signage and a gate to discourage the general public from entering this area. The museum storage facility would be located directly beside this road, so additional access roads would not be needed.
- Parking** - The site of the new museum storage facility is adjacent to an existing parking lot that is currently used by employees to access the maintenance facility. The capacity of this parking lot is sufficient for the employees and researchers who are likely to visit/use the museum storage facility. Because the museum storage facility will not be open to the general public, additional parking to the museum storage facility is not needed.
- Landscaping** - The area immediately adjacent to the museum storage facility will be landscaped/revegetated to the style of the native landscape. Native vegetation, rocks, or other natural features will be used, as appropriate, and the existing larger vegetation (few trees and bushes) will be preserved to the extent possible.

- **Artifact Relocation and Inventory** - Following construction of the museum storage facility, the artifacts will be relocated to the new facility. Methods for transportation and relocation of the artifacts will be determined following construction of the museum storage facility. While the artifacts are being moved to the museum storage facility, they will be cleaned, as needed, before they are moved into storage. During this process, it is hoped that the artifacts will also be inventoried. Following relocation of the artifacts to the new storage facility, the buildings that previously contained the collection will be cleaned, and may be reused for administrative or visitor use purposes.
- **Construction Staging** – To implement this alternative, an area in the disturbed zone of the National Historic Site will be used for construction staging and material stockpiling. This area will likely be located just north of the new museum storage facility, in an already disturbed, flat area. A temporary construction office such as a trailer may be erected in this location. This area will also be used to house construction equipment on a temporary basis.

This alternative is based on preliminary designs and best information available at the time of this writing. Specific distances, areas, and layouts used to describe the alternative are only estimates and could change during final site design. If changes during final site design are not consistent with the intent and effects of the selected alternative, then additional compliance would be completed, as appropriate.

Alternatives Considered and Dismissed

The following alternatives were considered for project implementation, but were ultimately dismissed from further analysis. Reasons for their dismissal are provided in the following alternative descriptions.

Modifying the Existing Storage Space – This alternative consisted of enhancing the existing locations used for storage of the collection to include provisions for climate control, a security system, and a fire protection system. This alternative was dismissed for not meeting a key project objective to provide adequate space to properly store the collection. In addition, the collection is currently stored in approximately ten historic buildings which would be difficult to retrofit to current standards, and doing so would likely compromise the integrity of the cultural resources. Therefore, this alternative was dismissed because it would not be feasible; the environmental impacts to the historic buildings would be substantial; and it would not provide adequate storage space.

Expanding the Collection to Other Existing On-Site Buildings – This alternative consisted of relocating portions of the collection to other buildings located at Hubbell Trading Post National Historic Site to provide more space for the objects, and better access for National Historic Site staff and researchers. This alternative was dismissed because it did not meet the project objective to promote artifact preservation and conservation through proper environmental controls. The majority of the buildings located at the National Historic Site are not equipped with the appropriate type of climate controls, security systems, or fire protection systems that are required for proper preservation of the collection. Further, the existing buildings at the National Historic Site are currently being used for other functions, and would not provide much, if any additional space to store the artifacts. Therefore, this alternative was dismissed from further consideration because it would not be feasible and would not provide adequate storage conditions.

Constructing/Using an Off-Site Museum Storage Facility – This alternative consisted of either building or using off-site facilities. Specifically, this alternative considered constructing a new facility on nearby property in the Ganado area or storing the collections at one of three existing museum facilities including the University of Arizona Special Collections, the Intermountain Region facility in Santa Fe, or the Western Archeological and Conservation Center. This alternative was dismissed for not meeting a key project objective to construct a museum storage facility in close proximity to Hubbell Trading Post National Historic Site. In addition, constructing a building off-site would require the purchase of land which would be cost prohibitive, and the existing facilities are not large enough to store all of the artifacts. Therefore, this alternative was dismissed from further analysis for a number of reasons including potentially increased costs, decreased feasibility, and reduced functionality.

Constructing an On-Site Museum Storage Facility Located Adjacent to Modular Facility (see Figure 3, location 1)

- This alternative consisted of constructing a museum storage facility at Hubbell Trading Post National Historic Site in an already disturbed area on the west side of the residential complex in an unoccupied location that is not currently used. The museum storage facility would have been constructed with the entrance facing east, and access/parking directly to the residential road. The proximity to the residential area would have adversely altered the viewshed from other residences in the complex, in addition to increasing the traffic on the residential road from those accessing the museum storage facility. This alternative would have also resulted in potentially adverse effects because the museum storage facility would have been visible from the historic district and cultural landscape, thereby altering the viewshed. In addition, this location contains numerous utilities including electric lines/boxes, power lines, a water line, and a historic ditch. Modification to this site would have entailed relocating these utilities, which would have substantially increased the cost and decreased the feasibility of the project in this location. Therefore, this alternative was dismissed from further analysis for a number of reasons including potentially substantial adverse environmental impacts, increased cost, and decreased feasibility.

Constructing an On-Site Museum Storage Facility Located between Residences (see Figure 3, location 2) - This alternative consisted of constructing a museum storage facility at Hubbell Trading Post National Historic Site in an already disturbed area on the south side of the residential complex between two residences. This alternative was dismissed primarily because of its proximity to the adjacent residences which would have adversely altered the viewshed, and introduced non-residential vehicles into the area. Proximity to the residences would have also adversely affected the social atmosphere of the residential complex by incorporating a non-residential, work-related structure into the community. Due to the location between two residences, this alternative also did not have much flexibility with regards which direction the facility could face, or potential future expansion, if needed. Therefore, this alternative was dismissed from further analysis because of potentially adverse environmental effects and feasibility.

Constructing an On-Site Museum Storage Facility Located Adjacent to the Well House (see Figure 3, location 3) - This alternative consisted of constructing a museum storage facility at Hubbell Trading Post National Historic Site to the east of the residential complex at the end of the maintenance road, adjacent to the well house. The topography of this location includes a berm/hill that covers most of the eastern portion of the site and a drainage/swale that runs north along the backside of the residences. Due to the topography, the museum storage facility would have had to be constructed partially into the hillside, making sure to stay out of the adjacent drainage. These topographical constraints lessened the feasibility of this location, and would have increased the costs considerably. In addition, the museum storage facility would have been located directly behind two, possibly three residences, and would have adversely altered the viewshed of at least these two or three residences by introducing a non-residential structure into their immediate viewshed. Therefore, this alternative was dismissed from further analysis due to potentially adverse environmental impacts, increased costs, and decreased feasibility.

Mitigation Measures for the Action Alternative

The following mitigation measures have been developed to minimize the degree and/or severity of adverse effects, and would be implemented during construction of the action alternative, as needed:

- To minimize the amount of ground disturbance, staging and stockpiling areas would be located in previously disturbed sites or existing paved areas near the maintenance facilities. All staging and stockpiling areas would be returned to pre-construction conditions following construction.
- Construction zones would be identified and fenced with construction tape, snow fencing, or some similar material prior to any construction activity. The fencing would define the construction zone and confine activity to the minimum area required for construction. All protection measures would be clearly stated in the construction specifications and workers would be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.
- The exterior treatment of the museum storage facility (texture, color, design, etc.) will be similar to the existing residences, so as to blend with the existing developed setting.
- Landscaping and revegetation of disturbed areas and areas immediately adjacent to the museum storage facility will take place following construction. Landscaping and revegetation will be designed to minimize the visual intrusion of the structure, and to blend with the existing setting. Revegetation efforts would strive to reconstruct the natural spacing, abundance, and diversity of native plant species using native species. All disturbed areas would be restored as nearly as possible to pre-construction conditions shortly after construction activities are completed. Weed control methods will be implemented to minimize the introduction of noxious weeds. Existing vegetation at the site will not be disturbed (including 1-2 trees and some bushes), to the extent possible.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as silt fences and/or sand bags would be used to minimize any potential soil erosion.
- Fugitive dust generated by construction will be controlled by spraying water on the construction site.
- To reduce noise and emissions, construction equipment will not be permitted to idle for long periods of time.
- To minimize possible petrochemical leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks.
- Construction workers and supervisors would be informed about special status species. Contract provisions would require the cessation of construction activities if a species were discovered in the project area, until park staff re-evaluates the project. This would allow modification of the contract for any protection measures determined necessary to protect the discovery.
- A cultural resources specialist will monitor initial ground-disturbing activities. Should construction unearth previously undiscovered archeological resources, work would be stopped in the area of any discovery and the National Historic Site would consult with the tribal historic preservation officer and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR 800.13, Post Review Discoveries. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) would be followed.

- The National Park Service would ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Contractors and subcontractors would also be instructed on procedures to follow in case previously unknown archeological resources are uncovered during construction.
- To minimize the potential for impacts to park visitors and park employees living in nearby residences, variations on construction timing would be considered. One option includes conducting the majority of the work in the off-season (winter) or shoulder seasons. Another option includes implementing daily construction activity curfews such as not operating construction equipment between the hours of 6 PM to 7 AM in summer (May – September), and 6 PM to 8 AM in the winter (October – April). The National Park Service will determine this in consultation with the contractor.
- Construction workers and supervisors would be informed about the special sensitivity of National Historic Site values, regulations, and appropriate housekeeping.
- According to *2001 Management Policies*, the National Park Service will strive to construct facilities with sustainable designs and systems to minimize potential environmental impacts. Development will not compete with or dominate National Historic Site features, or interfere with natural processes, such as the seasonal migration of wildlife or hydrologic activity associated with wetlands. To the extent possible, the design and management of facilities will emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The National Park Service also reduces energy costs, eliminates waste, and conserves energy resources by using energy-efficient and cost-effective technology. Energy efficiency is incorporated into the decision-making process during the design and acquisition of buildings, facilities, and transportation systems that emphasize the use of renewable energy sources.

Alternative Summaries

Table 1 summarizes the major components of the No Action and Preferred Alternatives, and compares the ability of these alternatives to meet the project objectives (the objectives for this project are identified in the *Purpose and Need* chapter). As shown in the following table, the Preferred Alternative meets each of the objectives identified for this project, while the No Action Alternative does not address any of the objectives.

Table 1 – Alternatives Summary and Extent to Which Each Alternative Meets Project Objectives

Alternative A – No Action	Alternative B – Preferred Alternative
A museum storage facility would not be constructed. The artifacts would remain in their present locations, which do not have climate control, fire protection, or security systems, and some of which may be infected with Hanta Virus. The National Park Service employees in charge of curation of the artifacts would remain in their existing offices which are also located in the historic district of the unit. Researchers would be required to locate and study the artifacts in their present locations.	A museum storage facility would be constructed in the developed zone of the National Historic Site. The building would be equipped with environmental controls, fire protection, and a security system. The collection would be relocated from its present location in various buildings to the new museum storage facility. The National Park Service employees in charge of curation would be relocated to offices in the new building. Researchers would be provided with adequate space to access and research the collection.
Meets Project Objectives?	Meets Project Objectives?
No. Continuing the existing conditions would not provide for appropriate, adequate, and consolidated storage of the National Historic Site's collection. Although this alternative meets the objective of maintaining the collection within close proximity to the park unit, it would not provide a safer environment for park employees who handle the collection. Adequate work/study spaces would not be provided, and the collection in its current state would not encourage increased artifact understanding, knowledge, and interpretation of the collection.	Yes. Constructing a museum storage facility would provide for appropriate, adequate, and consolidated storage of the National Historic Site's collection because the new facility would be equipped with environmental climate controls, a fire protection system, and a security system. The museum storage facility would be located in the park unit which meets the objective of maintaining the collection in close proximity to the park unit. The museum storage facility would provide a safer environment due to a cleaner, more spacious, and better organized working space. The improved working space would also enhance access to the artifacts, thereby encouraging increased artifact understanding, knowledge, and interpretation of the collection.

Table 2 summarizes the anticipated environmental impacts for the No Action and Preferred Alternatives. Only those impact topics that have been carried forward for further analysis are included in this table. The *Environmental Consequences* chapter provides a more detailed explanation of these impacts.

Table 2 – Environmental Impact Summary by Alternative

Impact Topic	Alternative A – No Action	Alternative B – Preferred Alternative
Historic Sites	No change in existing conditions.	Negligible to minor adverse impacts from introducing a new building into the official boundaries of a National Historic Landmark. Also, potential minor, adverse impacts from damage to the historic buildings during relocation of the collection from these buildings to the new facility.
Cultural Landscapes	No change in existing conditions.	Negligible to minor adverse impacts from introducing a new building into a cultural landscape. Also, potential minor, adverse impacts from damage to the historic buildings during relocation of the collection from these buildings to the new facility.
Museum Collections	Moderate adverse impacts from the continued deterioration of the collection located in inadequate and insufficient storage.	Moderate beneficial effects from improved storage and preservation of museum collections due to a storage facility with environmental controls, fire protection, and a security system. Also, potential temporary minor, adverse impacts from damage to the collection during relocation to the new facility.
Park Operations	No change in existing conditions.	Minor to moderate, beneficial effects from improved, easier, safer access to the collections for the curator to perform his/her duties. Minor, adverse impacts to additional time needed for maintenance of a new facility and increased costs of running a new facility. Also, temporary, minor, adverse impacts from additional time needed for the curator and staff to assist with relocating the collections.
Visitor Use and Experience	Negligible to minor, adverse impacts due to infrequent circulation of objects on display as a result of poor storage conditions, and difficulties experienced by researchers accessing the collections.	Minor, beneficial effects from a more varied display of objects; improved access to the collections for researchers; and a better understanding of the objects in the collection.
Visual Resources	No change in existing conditions.	Negligible effects on the viewshed from/to the historic district because the facility is not visible from the historic district. Minor, adverse impacts to residents/ residences directly within the viewshed of the new facility.

Identification of the Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the Council on Environmental Quality (CEQ). The CEQ provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, No Action, only minimally meets the above six evaluation factors because it supplies nominal storage for important museum collections, but it does not address the long-term need to improve storage conditions of the museum collections. Without the proper preservation facilities in place to protect significant cultural resources, this alternative only minimally meets the goal to preserve those objects for future generations.

Therefore, Alternative B is the environmentally preferred alternative because it best meets the purpose and need for action and best addresses the six evaluation factors. Alternative B meets criteria 1 by providing proper storage and preservation of the museum collections for future generations; criteria 2 by removing the museum collections from the existing historic structures which can then be converted to other uses; criteria 3 by minimizing the risk of Hanta Virus; criteria 4 by properly storing and preserving important museum objects; criteria 5 by improving access for researchers and park staff, thereby promoting research and learning opportunities; and criteria 6 by reusing the existing historic structures for other uses.

No new information came forward from public scoping or consultation with other agencies to necessitate the development of any new alternatives, other than those described and evaluated in this document. Alternative B is also recommended as the National Park Service Preferred Alternative, and meets the Purpose and Need and project objectives.

AFFECTED ENVIRONMENT

Introduction

This Chapter describes the existing setting or baseline conditions (i.e. affected environment) within the project area. This information will be used to analyze impacts against the current conditions at the site. Resource topics included in this chapter, and analyzed in terms of impacts in the following chapter *Environmental Consequences* include Historic Sites, Cultural Landscapes, Museum Collections, Park Operations, Visitor Use and Experience, and Visual Resources. Some general information and regulations pertaining to these resources are included in *Impact Topics Carried Forward for Further Analysis*. The *Introduction* also includes a general introduction about Hubbell Trading Post National Historic Site.

Historic Sites

Hubbell Trading Post was designated as a National Historic Landmark on December 20, 1960 (NPS 1989, 1961, & 1958, Uitley 1959). National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. The quality of national significance is ascribed to districts, sites, buildings, structures and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, technology and culture.

All National Historic Landmarks are included in the National Register of Historic Places, and may be listed under one or more of four significance criteria including Criterion A - association with important events; Criterion B - association with important people; Criterion C - distinctive design or construction; and Criterion D - information potential. Hubbell Trading Post National Historic Site is listed on the National Register of Historic Places under all four significance criteria as a late nineteenth, early-twentieth century trading post complex containing prehistoric and historic sites (NPS 1989). Based on the nomination form, nearly all of the 160 acres of Hubbell Trading Post National Historic Site is considered to be included in the National Historic Landmark, including the location of the proposed museum storage facility. The only portion not included on the nomination form for National Historic Landmark designation is the parcel north of the Pueblo Colorado Wash (acquired later and not included in original nomination form). Everything south of the Pueblo Colorado Wash, including the developed zone, is within the boundaries of the National Historic Landmark.

Beginning in the 1870s, John Lorenzo Hubbell established his homestead and the trading post, and is considered a significant person associated with Hubbell Trading Post as a National Historic Landmark because he was one of the most important Navajo traders in this area (Criterion B). Through his interactions with both Euro-American guests and the neighboring Native American tribes, Hubbell amassed a collection of over nearly 66,000 objects, which are still located at Hubbell Trading Post National Historic Site. The extensive trade that he conducted with the Navajo is considered an important activity to the history of the region (Criterion A). In addition, approximately six archeological sites have been identified at Hubbell Trading Post National Historic Site, which contribute to the significance of the site because they have or could yield information important to the prehistory or history of the site/region (Criterion D). None of these archeological sites are located in the area of potential effect for this project.

The buildings of the Hubbell homestead contribute to the significance of the National Historic Landmark because many are good examples of unique design or engineering (Criterion C). Historic buildings listed on the nomination form include the trading post, a wareroom annex, the Hubbell residence and other residences, a barn, hogans, a bread oven, a utility building, corrals and sheds, a school, a pumphouse, and a root cellar. All of the historic buildings are part of a complex located outside the developed zone of the National Historic Site which is the proposed location for the museum storage facility. These buildings are currently used for interpretive purposes, and visitors are permitted and encouraged to visit/explore the historic buildings.

The irrigation system and fields also contribute to the significance of Hubbell Trading Post as a National Historic Landmark because of their type and method of construction (Criterion C). Constructed in 1902-1908, the irrigation system supplied water to approximately 110 acres of agricultural land, divided into five fields. The eastern-most field was 13 acres in size, and located roughly where the developed zone (residential/ maintenance area) now resides, which is the proposed location for the museum storage facility. The agricultural fields in the developed zone were removed when the original residences were constructed in this area in 1995-1997. The site chosen for the construction of the museum storage facility is located near these residences, in the developed zone where some of the agricultural fields were previously removed.

Cultural Landscapes

A cultural landscape is defined as a reflection of human adaptation and use of natural resources, and is expressed both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions. To define a cultural landscape, many elements are analyzed including spatial organization, cluster arrangement, circulation, vegetation, land use, response to natural features, cultural traditions, structures, viewsheds, cultural sites, and boundaries. Shaped through time by historical land-use and management practices, as well as politics and property laws, levels of technology, and economic conditions, cultural landscapes provide a living record of an area's past, a visual chronicle of its history.

A cultural landscape report of Hubbell Trading Post National Historic Site was conducted by the National Park Service (NPS 1998). Results of this inventory concluded that the cultural landscape associated with the Hubbell Trading Post complex is significant in that it comprises one of the most complete assemblages of landscape resources associated with an early Navajo trading post operation. The cultural landscape of Hubbell Trading Post is eligible for the National Register of Historic Places under all four significance criteria (A, B, C, and D), and is considered an important contributing element to the National Historic Landmark status of the site.

While the existing Hubbell Trading Post landscape reveals the evolution of a rural vernacular landscape through a continuum of use that dates from the last quarter of the nineteenth century to the present day, the period of significance ranges from 1874 through 1967 with the primary period being defined as the period from 1874 through 1930. The period of significance defines the time J.L. Hubbell died and his heirs undertook full management of the trading post and associated business operations. Approximately seven areas of the site reflect patterns of land use by the Hubbell family including the agricultural fields/irrigation features; the trading post and Hubbell's residence; the manager's residence/bread ovens/chicken coop/yard area; the barn lot/sheds/corrals; the specialty garden plots; the school house/chapter house (now the visitor center); and the Hubbell Hill (located outside the National Historic Site boundary). In addition to these areas, the historic circulation patterns, vegetation, cultural traditions, land use, structures, viewsheds, and archeological resources of the site all contribute to the composition of the cultural landscape.

The location of the museum storage facility will be located in the developed zone of Hubbell Trading Post National Historic Site. This area was originally part of the historic agricultural fields which are considered an important element to the composition of the cultural landscape; however, in recent times these fields have been converted to the developed zone of the National Historic Site which contains housing and maintenance areas. Therefore, while the majority of the Hubbell Trading Post complex retains its integrity as a cultural landscape; the developed zone of the National Historic Site no longer reflects the historic setting or the overall cultural landscape identity. The cultural landscape report indicates that the original terraces used for farming have been removed to construct residences, and with the abandonment of agriculture, the natural community organization has been severely modified as several exotic invasive species have been introduced, particularly in the residential area. For these reasons, the developed zone of the National Historic Site is not considered a contributing element to the eligibility of the cultural landscape on the National Register of Historic Places.

Museum Collections

The National Park Service is custodian in perpetuity of irreplaceable and priceless museum collections that include objects, specimens, and archival and manuscript materials (textual, electronic, and audio-visual documents), representing cultural and natural resources in the United States, including but not limited to the disciplines of archeology, biology, ethnology, geology, history, and paleontology. Museum collections are part of the natural and cultural heritage of the country and are collected, preserved, and interpreted for public benefit.

The museum collection at Hubbell Trading Post National Historic Site consists of approximately 66,000 items, and includes both Native American and Euro-American objects dating from prehistoric times to the present (NPS 2001). Most of the collection was amassed by J.L. Hubbell from the operation of the trading post; through his interactions with the neighboring Navajo; and from hosting/entertaining guests in his home. The collection includes Native American rugs, basketry, pottery, and jewelry; archives (papers and photographs) related to history of the Hubbell family and the trading post; natural history specimens; prehistoric artifacts; and objects from the Hubbell homestead including furniture, decorative arts, framed works-of-art, farming equipment, horse-drawn vehicles, and architectural fragments. All of the objects in the collection are original to Hubbell Trading Post National Historic site. The museum collection at Hubbell Trading Post is an important element of the historic setting and contributes to the significance of the site as a National Historic Landmark. However, by itself, the collection is not eligible for the National Register of Historic Places.

Of the total 66,000 objects, approximately 86% of the collection, or 62,000 artifacts, is stored in ten or so locations scattered throughout the National Historic Site (mostly historic buildings in the central historic district). The remaining 14% of the collection, or 4,000 objects, is on permanent exhibit mostly in the Hubbell family home, trading post/store complex, and other buildings used for public interpretation. A few of the larger objects, such as the wagons and farm equipment, are on static display outdoors or inside the sheds near the corrals, which are used to interpret the historic setting. The collection is not expected to grow in size.

The approximate ten locations where artifacts are currently stored include the wareroom; Hubbell home hold closets, meat room, and root cellar; the Bally building (a temporary, temperature-controlled building inside the barn); the barn outside the Bally building; the bunkhouse; the wareroom extension; visitor center; and sheds. An assessment of these buildings conducted in conjunction with the Value Analysis Study (NPS 2001) indicated that the condition of the collection in these buildings is poor to fair. With no environmental climate controls, the collection is subject to fluctuating temperatures and humidity. Shelving, storage space, and lighting is inadequate, and the historic nature of the buildings subjects the objects to dust, insects, and rodents. Exposure to the Hanta Virus is likely to occur in a number of these buildings, which prevents regular maintenance and upkeep of the collection. These buildings are also not equipped with security systems or fire protection mechanisms, making the collection susceptible to theft and fire damage.

Park Operations

Because of the importance of the historic collections to Hubbell Trading Post National Historic Site, the park is committed to an active collections management program. To achieve this, the current staff at Hubbell Trading Post National Historic Site includes one full-time curator and one full-time museum technician. Part-time employees, interns, and volunteers also assist with the management of the collection at various times, depending on available funding (for employees) or the season (for interns/volunteers). The curator and museum technician currently have offices in historic district, near the trading post. The remainder of the park staff have offices in the visitor center.

Together, the curator and museum technician with the help of part-time employees, interns, volunteers, or other interested park staff have the responsibility to protect, inventory, and otherwise maintain the artifact collection. The curator is also responsible for loaning objects and providing access for researchers. A *Collection Management Plan* was prepared for Hubbell Trading Post National Historic Site that presents recommendations for proper curatorial maintenance of the collection (NPS 1975). Although this plan is somewhat out-of-date, it identifies various general curatorial activities that should be conducted for items on exhibit and in storage on a daily, weekly, monthly, and yearly basis. The current curatorial staff at Hubbell Trading Post National Historic Site have had difficulty performing many of these regular activities because of the poor condition of artifact storage.

The maintenance division at Hubbell Trading Post National Historic Site also assists with maintenance of the collection by performing general housekeeping duties on the buildings in which the artifacts are stored. They are responsible for ensuring that the grounds and buildings are in proper working order and clean. This includes small repairs, pest control, minor landscaping, and general housekeeping. The maintenance division currently at the National Historic Site consists of three full-time and one subject-to-furlough employees. The maintenance facility for the maintenance division is located immediately adjacent to the proposed location for the museum storage facility in the developed zone of the National Historic Site.

Visitor Use and Experience

Total recreation visits to Hubbell Trading Post National Historic Site for 2002 numbered 193,453. Hubbell Trading Post National Historic Site is open year round, except on Thanksgiving, Christmas, and New Year's Days. The average length of stay for visitors is less than two hours. Visitors to the National Historic Site may walk around or take a guided tour of the attractions in the historic district including the visitor center, trading post, Hubbell home, and some of the associated outbuildings. Historic objects are on display in all of these historic buildings, including basketry, rugs, jewelry, framed works-of-art, and pottery. These objects are not frequently rotated with other objects in the collection because of the difficulties accessing artifacts in storage. Navajo women also demonstrate rug weaving in the visitor center.

The trading post is still active, and maintains an inventory of food products, supplies, and artworks such as Native American rugs and jewelry. These items are available for purchase or trade by visitors to the National Historic Site. Recreational visitors to the trading post commonly purchase food products as refreshments and Native American artworks. The neighboring Navajo primarily visit the trading post to trade or purchase groceries and other supplies.

Currently, visitors to the National Historic Site are not permitted to access the collections in storage that are not on display in the interpretive areas of the park (those located in the various historic outbuildings). These storage areas are not considered safe for general public use and are not equipped with security systems to protect the artifacts. A visitor may be granted access to the collections upon consent of the superintendent, and with a park staff escort. Visitors generally do not access areas outside the historic district such as the outlying agricultural fields or the developed zone of the National Historic Site. The outlying agricultural fields are typically not visited because they can be viewed from the historic district, and there is no trail or interpretation into the fields. The developed zone of the National Historic Site (proposed location for the museum storage facility) is located at the entrance and is clearly marked for access by park staff only. Therefore, few if any visitors access the developed zone of the National Historic Site. Instead, visitors are directed into the National Historic Site toward the historic district, which is located across the bridge about a ¼ mile from the entrance.

To encourage use and understanding of the collection, Hubbell Trading Post National Historic Site has established a loan program for certain objects in the collection. Museum facilities or other institutions may borrow certain pieces of the collection for display or research purposes. The curator is responsible for loaning pieces of the collection.

Visual Resources

The proposed location for the museum storage facility is on an already disturbed parcel of land in the developed zone of the National Historic Site. This area is fairly flat with little vegetation. Because this area has been previously disturbed by development of residences, roads, maintenance buildings, and other structures, it is not characteristic of the historic setting for which Hubbell Trading Post National Historic Site is significant.

The viewshed around the proposed location for the museum storage facility includes elements both within and outside the boundaries of the National Historic Site. Inside the National Historic Site, the viewshed consists of the park entrance and entrance road/bridge, the residential area, the maintenance facilities/storage units, the parking lot adjacent to the maintenance buildings, and a portion of the Pueblo Colorado Wash. The historic district including the trading post, Hubbell home, and visitor center cannot be seen from the location of the museum storage facility, or vice versa.

Elements within the viewshed located outside of the National Historic Site boundaries include a portion of Navajo Route 3 (State Highway 264, paved) and various buildings on the Navajo Nation. Improvements along State Highway 264 in addition to increased accessibility to and within the Ganado area have resulted in increased residential and commercial development on the Navajo Nation. Historically, commercial developments on the Nation were limited to the widely scattered trading post operations. Residential development on the Nation was characterized by dispersed clusters of dwellings and other support structures of large extended families. Today, a variety of service stations, markets, social service complexes (school, post

office, sewage treatment plant, etc.) and housing projects are located throughout the Nation, and several are visible from Hubbell Trading Post National Historic Site.

ENVIRONMENTAL CONSEQUENCES

Introduction and Methodology

This chapter analyzes the potential environmental consequences, or impacts, that will occur as a result of implementing the proposed project. Topics analyzed in this chapter include Historic Sites, Cultural Landscapes, Museum Collections, Park Operations, Visitor Use and Experience, and Visual Resources. Direct, indirect, and cumulative effects, as well as impairment are analyzed for each resource topic carried forward. Because this document serves as a combined Environmental Assessment/Assessment of Effect, a separate methodology for cultural resources is included in this introduction.

Potential impacts are described in terms of type, context, duration, and intensity. General definitions are defined as follows, while more specific impact thresholds are given for each resource at the beginning of each resource section.

- **Type** describes the classification of the impact as either beneficial or adverse, direct or indirect:
 - Beneficial**: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
 - Adverse**: A change that moves the resource away from a desired condition or detracts from its appearance or condition.
 - Direct**: An effect that is caused by an action and occurs in the same time and place.
 - Indirect**: An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.
- **Context** describes the area or location in which the impact will occur. Are the effects site-specific, local, regional, or even broader?
- **Duration** describes the length of time an effect will occur, either short-term or long-term:
 - Short-term** impacts generally last only during construction, and the resources resume their pre-construction conditions following construction.
 - Long-term** impacts last beyond the construction period, and the resources may not resume their pre-construction conditions for a longer period of time following construction.
- **Intensity** describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Because definitions of intensity vary by resource topic, intensity definitions are provided separately for each impact topic analyzed in this Environmental Assessment/Assessment of Effect.

Cumulative Effects: The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for both the No Action and Preferred Alternatives.

Cumulative impacts were determined by combining the impacts of the Preferred Alternative –construction of a museum storage facility - with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects at Hubbell Trading Post National Historic Site and, if applicable, the surrounding region. The geographic scope for this analysis includes elements within the general viewshed of the proposed museum storage facility, while the temporal scope includes projects within a range of approximately 10 years. Given this, the following projects were identified for the purpose of conducting the cumulative effects analysis, and are listed in order from future to past:

- **Roadway Improvements to State Highway 264, Arizona Department of Transportation, Future** – This project may take place within the next ten years, and would consist of widening State Highway 264, potentially to three to five lanes.
- **General Development along State Highway 264, past, present, and future** – Continual development along State Highway 264 and on the Navajo Nation has resulted in the construction of buildings and structures that are visible from Hubbell Trading Post National Historic Site.
- **Effluent Project, Hubbell Trading Post National Historic Site, Summer 2003** – This project consists of installing temporary irrigation pipe to carry treated effluent from a nearby sewage lagoon to restore the cottonwood canopy of the riparian zone of the Pueblo Colorado Wash.
- **Visitor Center HVAC, Hubbell Trading Post National Historic Site, Summer 2003** – This project consists of installing the first-ever HVAC system in the Visitor Center. It will be engineered so as not to be a visual intrusion on the cultural landscape. (This project has not yet started. Funds only received in July 2002).

- **Visitor Center Parapet Repair, Hubbell Trading Post National Historic Site, Summer 2002** – This project consisted of replacing in kind the deteriorated stone of the historic stone parapet on the Visitor Center.
- **Natural Gas System Replacement, 2003** - This project will replace the antiquated and unsafe natural gas system that services the entire Hubbell compound.
- **Fire Suppression System Replacement, 2002** - This project replaced an outdated fire suppression system for the key historic structures in the cultural landscape.
- **Reintroduction of Agriculture, Hubbell Trading Post National Historic Site, present** – This project consists of reintroducing agriculture to the National Historic Site, in order to re-establish an important element of the cultural landscape. It is currently in the planning phase.
- **Ganado Irrigation Water Conservation Project, Bureau of Reclamation, 2000-present** – This project consists of rehabilitating and replacing portions of the existing Ganado Irrigation System located within the Ganado Chapter of the Navajo Nation.
- **Bridge Replacement, Hubbell Trading Post National Historic Site, 2000** – This emergency project consisted of replacing the non-historic bridge over the tributary to the Pueblo Colorado Wash near the entrance of the National Historic Site. Design of bridge was purposefully simple, rustic, and compatible with cultural landscape.
- **Historic Hubbell Barn Stabilization, 2000** - This project provided emergency structural stabilization of the 100 year-old historic two-story barn in the Hubbell historic compound.
- **Employee Housing, 1995-1997** – Ten residential houses were constructed in what is now considered the developed zone of the National Historic Site. This project removed portions of the historic agricultural fields in order to construct the housing units.

Impairment: National Park Service's Management Policies, 2001 require analysis of potential effects to determine whether or not actions would impair park resources (NPS 2000b). The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values.

Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values. An impact to any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

Impairment may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. A determination on impairment is made in the Conclusion section for each of the resource topics carried forward in this chapter.

Impacts to Cultural Resources and Section 106 of the National Historic Preservation Act: In this Environmental Assessment/Assessment of Effect, impacts to historic properties are described in terms of type, context, duration, and intensity, as described above, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). This Environmental Assessment/Assessment of Effect is intended, however, to comply with the requirements of both NEPA and §106 of the National Historic Preservation Act (NHPA). To achieve this, a §106 summary is included under the Preferred Alternative for each of the cultural topics carried forward including Historic Sites, Cultural Landscapes, and Museum Collections. Archeological sites and ethnographic resources were dismissed from further consideration in *Impacts Dismissed from Further Consideration* because none were identified in the project area. The §106 Summary is intended to meet the requirements of §106 and is an assessment of the effect of the undertaking (implementation of the alternative) on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations.

Under the Advisory Council's regulations, a determination of either *adverse effect* or *no adverse effect* must be made for affected historic properties that are eligible for or listed on the National Register of Historic Places. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualify it for inclusion in the

National Register (e.g. diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). **Adverse effects** also include reasonably foreseeable effects caused by the Preferred Alternative that would occur later in time; be farther removed in distance; or be cumulative (36 CFR Part 800.5, Assessment of Adverse Effects). A determination of **no adverse effect** means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register of Historic Places

In accordance with the Advisory Council on Historic Preservation's regulations implementing §106 of the NHPA (36 CFR Part 800, Protection of Historic Properties), impacts to historic properties for this project were identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that were either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the National Register; and (4) considering ways to avoid, minimize, or mitigate adverse effects.

CEQ regulations and the National Park *Service's Conservation Planning, Environmental Impact Analysis and Decision-Making* (Director's Order #12) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact (e.g. reducing the intensity of an impact from major to moderate or minor). Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by §106 is similarly reduced. Although adverse effects under §106 may be mitigated, the effect remains adverse.

In order for a historic property to be listed in the National Register of Historic Places, it must meet one or more of the following criteria of significance: A) associated with events that have made a significant contribution to the broad patterns of our history; B) associated with the lives of persons significant in our past; C) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; D) have yielded, or may be likely to yield, information important in prehistory or history. In addition, the historic property must possess integrity of location, design, setting, materials, workmanship, feeling, association (*National Register Bulletin, How to Apply the National Register Criteria for Evaluation*).

Historic Sites

Intensity Level Definitions

In order for a site to be listed in the National Register of Historic Places, it must meet one or more of the four criteria of significance (A, B, C, or D), as described in the introduction to this chapter. The site must also possess integrity of its defining features – buildings, structures, objects -- necessary to convey its significance (*Secretary of the Interior's Standards for the Treatment of Historic Properties*). Further, for a site to be designated as a National Historic Landmark, it must convey significance at a national level. For purposes of analyzing potential impacts to the National Historic Landmark of Hubbell Trading Post, the thresholds of change for the intensity of an impact are defined as follows:

- Negligible:** Impact(s) is at the lowest levels of detection - barely perceptible and not measurable. For purposes of §106, the determination of effect would be **no adverse effect**.
- Minor:** Adverse: Disturbance of a historic property results in little, if any, loss of significance or integrity and the National Register eligibility of the property is unaffected. For purposes of §106, the determination of effect would be **no adverse effect**.
Beneficial: The historic property is maintained/preserved. For purposes of §106, the determination of effect would be **no adverse effect**.
- Moderate:** Adverse: The impact would alter a character defining feature of the historic property, but would not diminish the integrity of the property to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be **no adverse effect**.
Beneficial: The historic property is maintained/preserved. For purposes of §106, the determination of effect would be **no adverse effect**.
- Major:** Adverse: The impact would diminish the significance and integrity of the property to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be **adverse effect**.
Beneficial: The action includes active intervention to preserve the site. For purposes of §106, the determination of effect would be **no adverse effect**.
- Impairment:** A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hubbell Trading Post National Historic Site; (2) key to the natural or cultural integrity of the National Historic Site; or (3) identified as a goal in the National Historic Site's general management plan or other relevant National Park Service planning documents.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative would result in negligible to minor adverse impacts to Hubbell Trading Post as a National Historic

Landmark. Historic buildings and structures that contribute to the significance of the National Historic Landmark would not be affected. Due to the existing poor storage conditions of the collection, potential minor indirect adverse impacts would result from continued deterioration of historic objects, which are an important element of the National Historic Landmark.

Cumulative Effects: The proposed location for the museum storage facility is located in the developed zone of the National Historic Site which has been continuously disturbed since the park was established in 1965. Construction of residences, maintenance buildings, and storage units over the years have resulted in the removal of the historic agricultural fields in the developed zone, which comprise only a small percentage of the entire network of agricultural fields. Some remnants of the irrigation system still remain in the developed zone, but little evidence of the terracing and farm fields remains. Future projects including the reintroduction of agriculture will improve the portions of the remaining farm fields and irrigation system located outside the developed zone in the National Historic Site. Other projects such as the Ganado Irrigation Water Conservation Project will improve portions of the historic irrigation ditch located outside the National Historic Site. Therefore, although the establishment of the developed zone in the National Historic Site removed portions of the historic agricultural fields, the majority of these fields lie outside the developed zone and will be improved over time with future enhancement projects. Other projects scheduled to occur in the near future, such as barn stabilization and the parapet repair to the visitors center, are designed to improve the National Historic Site's historic buildings through various preservation and restoration techniques. In light of this, the anticipated minor adverse impacts to the National Historic Landmark from the deterioration of the collection anticipated under the No Action Alternative would be minimized because of the greater improvements to other portions of the National Historic Landmark. Therefore, the impacts of the No Action Alternative in addition to the impacts of other past, present, and reasonably foreseeable future actions would result in a cumulative negligible to minor beneficial effect to the National Historic Landmark.

Conclusion: The No Action Alternative would result in negligible to minor adverse impacts to the National Historic Landmark as a result of continuing deterioration of the historic collection. Cumulatively, the No Action Alternative, in addition to the various planned preservation and restoration projects for the National Historic Site's historic buildings and structures, would result in negligible to minor beneficial effects to the National Historic Landmark. Because the project will not result in major, adverse impacts to the National Historic Landmark, there would be no impairment of the park's resources or values.

Impacts of Alternative B (Preferred Alternative)

Because the entirety of Hubbell Trading Post National Historic Site is considered a National Historic Landmark, the proposed construction of a museum storage facility will technically take place within the boundaries of a National Historic Landmark. The effect of this action, however, is expected to be minor because the location of the museum storage facility will be in an already disturbed area within the developed zone of the National Historic Site. This disturbed area no longer contributes to the significance for which Hubbell Trading Post National Historic Site is considered a National Historic Landmark. The Preferred Alternative will not remove or alter any historic buildings or structures, nor will the museum storage facility be visible from the historic district. Therefore, the Preferred Alternative will have a minor adverse impact because it will introduce a non-historic building into a National Historic Landmark, but the building will be located in a previously disturbed area that no longer contributes to the significance of the site. Further, mitigation measures are designed to lessen the impact of introducing a new building into a National Historic Landmark by including exterior treatments to blend with the surrounding buildings and vegetation/landscaping to provide visual buffers.

The Preferred Alternative will provide adequate and appropriate storage for the collection, which is an important element of the National Historic Landmark. Improvements to the preservation and storage of the collection will result in a negligible to minor beneficial effect to the National Historic Landmark.

All ground disturbing activities related to the construction of the museum storage facility will occur within the developed zone of the National Historic Site. Staging and stockpiling areas will be located in the developed zone in proximity to the new museum storage facility. Due to the location of the museum storage facility approximately ¼ mile away from the historic district, noise or vibrations from construction will have negligible effects on the historic buildings and structures associated with the National Historic Landmark. Construction equipment will likely not be visible from the historic complex, and will be removed following the completion of construction activities.

Relocation of the collection from the historic buildings to the museum storage facility would entail numerous trips in and out of the buildings by park staff; dismantling shelving/storage units; and physically moving the artifacts out of the buildings and into the new building. These activities increase the potential for damaging the historic buildings and/or objects in the collection, which could result in a minor adverse impact to the National Historic Landmark. However, mitigation measures, including the monitoring of these activities by park staff, are designed to minimize potential damage to historic buildings, structures, and objects from occurring. Any damage that does occur to historic buildings, structures, and objects will be repaired in accordance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Relocating the collection from the various historic buildings to the museum storage facility will change the current function of the historic buildings. Instead of being used primarily for storage, these buildings will be able to provide space for other activities. Because many of these buildings were not originally used for storage and have not represented their original functions for some time, the impact of changing the functions of these buildings could allow for possible historic interpretation of these buildings. If the original historic functions of these buildings were recreated, this would be a negligible to minor beneficial effect to the National Historic Landmark. However, the new functions of these buildings have not been determined, and are not considered in this analysis, but will be determined in accordance with *Secretary of the Interior's Standards for the Treatment of Historic Properties* to preserve the integrity of Hubbell Trading Post as a National Historic Landmark.

Relocating the collections will also allow these buildings to be cleaned, which will reduce the threat of rodent infestation, and further preserve and enhance the safety of the buildings.

Cumulative Effects: As described in the first paragraph of the cumulative effects analysis under Alternative A in this section, various projects have or will improve the historic character of the National Historic Landmark (please refer to this section for more information). Given this, the anticipated negligible to minor adverse impacts to the National Historic Landmark from the introduction of the new museum storage facility in the developed zone of the park would be minimized because of the greater

improvements to other portions of the National Historic Landmark. The Preferred Alternative will also improve the collections, which are an important element of the National Historic Landmark. Therefore, the impacts of the Preferred Alternative in addition to the impacts of other past, present, and reasonably foreseeable future actions would result in a cumulative minor beneficial effect to the National Historic Landmark.

Conclusion: The Preferred Alternative would result in negligible to minor adverse impacts as a result of introducing a new building into the National Historic Landmark. The Preferred Alternative would also result in minor beneficial impacts to the National Historic Landmark as a result of improvements to the storage and preservation of the collection, which is an important part of the National Historic Landmark status. Potential minor adverse impacts could also occur to the historic buildings, structures, and objects in the historic district from activities associated with relocating the collection. Cumulatively, the Preferred Alternative, in addition to the various planned preservation and restoration projects for the National Historic Site's historic buildings and structures, would result in minor beneficial effects to the National Historic Landmark. Because the project will not result in major, adverse impacts to the National Historic Landmark, there would be no impairment of the park's resources or values.

§106 Summary: After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.2, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the Preferred Alternative would have *no adverse effect* on the National Historic Landmark or contributing features to the National Historic Landmark of Hubbell Trading Post National Historic Site.

Cultural Landscapes

Intensity Level Definitions

In order for a cultural landscape to be listed in the National Register of Historic Places, it must meet one or more of the four criteria of significance (A, B, C, or D), as described in the introduction to this chapter. The cultural landscape must also possess integrity of its defining features -- spatial organization and land forms; topography; vegetation; circulation networks; water features; and structures/buildings, site furnishings or objects -- necessary to convey its significance (*Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes*). For purposes of analyzing potential impacts to the cultural landscape of Hubbell Trading Post, the thresholds of change for the intensity of an impact are defined as follows:

- Negligible:** Impact(s) is at the lowest levels of detection - barely perceptible and not measurable. For purposes of §106, the determination of effect would be *no adverse effect*.
- Minor:** Adverse: The impact would not affect a character defining pattern(s) or feature(s) of a National Register of Historic Places eligible or listed cultural landscape. For purposes of §106, the determination of effect would be *no adverse effect*.
Beneficial: The result is preservation of character defining patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be *no adverse effect*.
- Moderate:** Adverse: The impact would alter a character defining pattern (s) or feature(s) of the cultural landscape but would not diminish the integrity of the landscape to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be *no adverse effect*.
Beneficial: The result is rehabilitation of a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be *no adverse effect*.
- Major:** Adverse: The impact would alter a character defining pattern(s) or feature(s) of the cultural landscape to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be *adverse effect*.
Beneficial: The result is restoration of a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be *no adverse effect*.
- Impairment:** A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hubbell Trading Post National Historic Site; (2) key to the natural or cultural integrity of the National Historic Site; or (3) identified as a goal in the National Historic Site's general management plan or other relevant National Park Service planning documents.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative would result in negligible to minor adverse impacts to Hubbell Trading Post as a cultural landscape. Historic buildings and structures that contribute to the significance of the cultural landscape would continue to be used for storage of historic objects, which does not portray the historic functions of these buildings, and therefore does not reflect the

cultural landscape. Due to the existing poor storage conditions of the collection, potential minor indirect adverse impacts would result from continued deterioration of historic objects, which in part, contribute to feeling and character of the cultural landscape.

Cumulative Effects: As described in the first paragraph of the cumulative effects analysis under *Alternative A* in the *Historic Site* section, various projects have or will improve the historic character of the cultural landscape at Hubbell Trading Post National Historic Site (please refer to this section for more information). As a result, the negligible to minor adverse impacts to the cultural landscape from *Alternative A* would be minimized because of the greater improvements to other portions of the cultural landscape. Therefore, the impacts of the No Action *Alternative* in addition to the impacts of other past, present, and reasonably foreseeable future actions would result in a cumulative negligible to minor beneficial effect to the cultural landscape.

Conclusion: The No Action *Alternative* would result in negligible to minor adverse impacts to the cultural landscape as a result of continuing deterioration of the historic collection. Cumulatively, the No Action *Alternative* in addition to the various planned preservation and restoration projects for the National Historic Site's historic buildings and structures would result in negligible to minor beneficial effects to the cultural landscape. Because the project will not result in major, adverse impacts to the cultural landscape at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

Impacts of Alternative B (Preferred Alternative)

The Preferred *Alternative* is expected to have negligible to minor adverse impacts on the cultural landscape of Hubbell Trading Post because it will introduce a new building within the boundaries of the cultural landscape. However, the museum storage facility will be located in an already disturbed area within the developed zone of the National Historic Site, which is considered to be a non-contributing element of the cultural landscape. Further, the Preferred *Alternative* will not physically remove or alter any historic buildings or structures, nor will the museum storage facility be visible from the historic district. Because the museum storage facility will be located in the developed zone of the National Historic Site which is a non-contributing portion of the cultural landscape, the Preferred *Alternative* will not disturb other characteristics associated with the cultural landscape including spatial organization, cluster arrangement, circulation, vegetation, land use, response to natural features, cultural traditions, cultural sites, or boundaries. Mitigation measures will lessen the impact of introducing a new building into a cultural landscape by including exterior treatments to blend with the surrounding buildings and vegetation/landscaping to provide visual buffers.

The Preferred *Alternative* will provide adequate and appropriate storage for the collection, which is an important element of the historic setting and cultural landscape. Improvements to the preservation and storage of the collection will result in a negligible to minor beneficial effect to cultural landscape.

Potential impacts from construction and relocating the collection from the historic district to the museum storage facility will be the same as those described in *Impacts of Alternative B (Preferred Alternative)* in the *National Historic Landmark* section (please refer to the last three paragraphs of this section).

Cumulative Effects: As described in the first paragraph of the cumulative effects analysis under *Alternative A* in the *Historic Site* section, various projects have or will improve the historic character of the cultural landscape at Hubbell Trading Post National Historic Site (please refer to this section for more information). In light of this, the negligible to minor adverse impacts to the cultural landscape from the introduction of the new museum storage facility in the developed zone of the National Historic Site would be minimized because of the greater improvements to other portions of the cultural landscape. The Preferred *Alternative* will also improve the collections, and may restore the functions of some of the historic buildings, which are important elements of the cultural landscape. Therefore, the impacts of the Preferred *Alternative* in addition to the impacts of other past, present, and reasonably foreseeable future actions would result in overall minor beneficial effect to the cultural landscape.

Conclusion: The Preferred *Alternative* would result in negligible to minor adverse impacts as a result of introducing a new building into the cultural landscape. The Preferred *Alternative* would also result in minor beneficial impacts to the cultural landscape as a result of improvements to the storage and preservation of the collection, and possible restoration of the original functions of some of the historic buildings. Potential minor adverse impacts could also occur to the historic buildings, structures, and objects from activities associated with relocating the collection. Cumulatively, Preferred *Alternative*, in addition to the various planned preservation and restoration projects for the National Historic Site's historic buildings and structures, would result in minor beneficial effects to the cultural landscape. Because the project will not result in major, adverse impacts to the cultural landscape at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

§106 Summary: After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.2, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the Preferred *Alternative* would have *no adverse effect* on the cultural landscape at Hubbell Trading Post National Historic Site.

Museum Collections

Intensity Level Definitions

Fire, theft, and vandalism can threaten a park's museum collections of prehistoric and historic artifacts, botanical and zoological specimens, and archival and photographic materials. The preservation of museum collections including archives is an ongoing process of conservation with a primary goal of preserving the collections in as stable an environment as possible. The methodology for this impact analysis is based on how the character defining features of the collection are affected by storage of the collection in terms of security; fire detection and suppression; temperature and humidity control; and present and future space needs for curation, storage, and research:

Negligible:	Impact(s) is at the lowest levels of detection - barely perceptible and not measurable.
Minor:	<p><u>Adverse:</u> The impact would be measurable and perceptible, but would not affect the character defining feature(s) of the collection.</p> <p><u>Beneficial:</u> The effect is measurable and perceptible due to stabilization/ preservation of the character defining feature(s) of the collection.</p>
Moderate:	<p><u>Adverse:</u> The impact would alter the character defining feature(s) of the collection, which may slightly diminish the integrity of the resource and/or its relationship with the park's purpose and significance.</p> <p><u>Beneficial:</u> The effect is noticeable due to rehabilitation/ preservation of the character defining feature(s) of the collection.</p>
Major:	<p><u>Adverse:</u> The impact would alter the character defining feature(s) of the collection, which would substantially diminish the integrity of the resource and/or its relationship with the park's purpose and significance.</p> <p><u>Beneficial:</u> The effect is readily apparent due to restoration of the character defining feature(s) of the collection.</p>
Impairment:	A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Hubbell Trading Post National Historic Site; (2) key to the natural or cultural integrity of the National Historic Site; or (3) identified as a goal in the National Historic Site's general management plan or other relevant National Park Service planning documents.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative would result in moderate adverse impacts to the museum collection at Hubbell Trading Post National Historic Site. The collection would continue to be stored in the ten or so various locations around the National Historic Site that have inadequate space and no environmental climate controls, a security system, or a fire protection system. Without environmental climate controls, the potential for artifact deterioration would persist, which could eventually lead to the loss of pieces of the collection. Without a security system and fire protection system, the collections would continue to be susceptible to fire and theft. The lack of space, insufficient lighting/shelving, unsafe access, and the danger of contracting Hanta Virus would continue to discourage regular maintenance, use, and research of the collection. Dust, insects, and rodents would also promote further artifact damage.

Cumulative Effects: The collection at Hubbell Trading Post National Historic Site has been stored in various unfit locations at the National Historic Site over the years, which has led to artifact deterioration and an incomplete inventory of objects in the collection. Lack of adequate curatorial space with appropriate environmental climate controls has contributed to the deterioration of museum artifacts at Hubbell Trading Post National Historic Site, which has and will result in a moderate, long-term, adverse impact to museum collections. Other projects scheduled to occur in the near future, such as barn stabilization and fire suppression replacement in various historic buildings, are designed to improve the National Historic Site's historic buildings through various preservation and restoration techniques. Some of these buildings are used for storage of historic objects from the collection, and these projects may improve the storage of the museum collections to a minor degree. However, the minor beneficial effects of these projects, in addition to the long-term, moderate adverse impact of the No Action Alternative, would cumulatively have little effect on the condition of the museum collection. Therefore, cumulatively, the No Action Alternative would continue to have an overall minor to moderate, long-term adverse impact on museum collection.

Conclusion: The No Action Alternative would result in moderate, long-term, adverse impacts to museum collections from the continued deterioration of objects located in inadequate and insufficient storage. Cumulatively, the No Action Alternative in addition to other past, present, or reasonably foreseeable future actions would have a minor to moderate, long-term, adverse impact to museum collections. Because the project will not result in major, adverse impacts to the museum collections at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

Impacts of Alternative B (Preferred Alternative)

The Preferred Alternative will provide a museum storage facility that will house the majority of the 66,000 items stored at the National Historic Site, which will result in an overall moderate, long-term, beneficial effect to the collection. The new storage facility will provide adequate space for the collection, including appropriate shelving and storage equipment for the different objects in the collection. A new building will also allow for the consolidation of the collection into one facility (aside from those objects on display or on loan at various times). The additional, consolidated space achieved through a new building will improve access to the collection, thereby promoting more regular curatorial duties to be conducted including inventory, research, cleaning, and preservation of the collection.

The museum storage facility will be equipped with environmental climate controls, a security system, and a fire protection system, which will result in a moderate, long-term, beneficial effect to the collection. The environmental climate controls will provide the appropriate temperature and humidity levels required for proper preservation of the collection, thereby prolonging the life of the collection. A security system will reduce the risk of theft, while the fire protection system will lessen the chance of damage to the collection from fire. A new museum storage facility will further protect the collections because damage to the collections from dust, insects, and rodents will be greatly minimized.

The Preferred Alternative will entail relocating the collections from their present locations into the museum storage facility.

Relocation of the collection from the historic buildings to the museum storage facility would entail numerous trips in and out of the buildings by park staff; dismantling shelving/storage units; and physically moving the artifacts out of the buildings and into the new building. These activities could increase the potential for damaging the objects in the collection, which could potentially result in minor adverse impacts to these objects. However, mitigation measures, including the monitoring of transport activities by park staff, are designed to minimize potential damage to the collection.

Cumulative Effects: As described in the cumulative effects analysis under Alternative A in this section, the current unsuitable storage of the museum collection at Hubbell Trading Post National Historic Site has resulted in the deterioration of the historic objects (please refer to this section for more information). Given this, the moderate beneficial impacts to the museum collection from the construction of a museum storage facility, combined with the moderate adverse impacts of continued artifact deterioration, will cumulatively benefit the collections at Hubbell Trading Post National Historic Site to a moderate degree.

Conclusion: The Preferred Alternative will result in a moderate, beneficial, long-term effect to the collections because the museum storage facility will provide adequate storage space with proper environmental controls, a security system, and fire detection/prevention devices, thereby resulting in long-term benefits to the preservation of the collection. Minor, adverse impacts may occur to certain items in the collection if they are damaged during relocation to the museum storage facility. Cumulatively, the Preferred Alternative in addition to other past, present, and reasonably foreseeable future actions will have a moderate, beneficial, long-term effect. Because the project will not result in major, adverse impacts to the museum collections at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

§106 Summary: After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.2, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the Preferred Alternative would result in a determination of *no historic properties affected* for the museum collection at Hubbell Trading Post National Historic Site because although it is a contributing element to the National Historic Landmark, it in of itself does not qualify for the National Register of Historic Places.

Park Operations

Intensity Level Definitions

Implementation of a project can change the operations of a park. A project may affect the number of employees needed at the park; the type of duties that need to be conducted; when/who will conduct these duties; how activities should be conducted; and administrative procedures. The methodology used to assess potential changes to park operations are defined as follows:

- Negligible:** Park operations would not be affected or the effect would be at or below the lower levels of detection, and would not have an appreciable effect on park operations.
- Minor:** The effect would be detectable, but would be of a magnitude that would not have an appreciable adverse or beneficial effect on park operations. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.
- Moderate:** The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- Major:** The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public, and be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative will not change current park operations at Hubbell Trading Post National Historic Site. The curator and museum technician will continue to be responsible for curatorial duties, and their offices will not change location. Management of the collections will continue to be compromised due to the poor storage conditions, including limited space, unconsolidated artifacts, poor lighting, and health issues (particularly Hanta Virus). Research, inventory, and other activities that require dedicated work space will be limited due to the insufficient space in the existing storage buildings. Maintenance crews at Hubbell Trading Post National Historic Site will continue to perform general maintenance on the existing buildings used for storage of the collection. Because there will be no change to park operations (curatorial, maintenance, or otherwise), the No Action Alternative will have a negligible effect on park operations.

Cumulative Effects: Overall, the majority of past, present, and reasonably foreseeable future projects will have negligible impacts on long-term park operations because additional employees will not be needed for these projects; administrative procedures for the National Historic Site will not be affected; and the duties of employees will not be altered. However, during construction of these projects, park employees may be temporarily affected to a minor adverse degree because of additional duties such as monitoring the construction or advising contractors, but these additional duties will be eliminated following construction. Cumulatively, the negligible effects of the No Action Alternative in addition to the temporary, minor, adverse effects to employees during construction of other past, present, and reasonably foreseeable future projects will result in negligible to minor adverse impacts to park operations on a short-term basis as a result of additional duties.

Conclusion: The No Action Alternative will have a negligible impact because there would be no change to existing park operations. Cumulatively, the No Action Alternative combined with other past, present, and reasonably foreseeable future projects will result in negligible to minor adverse impacts to park operations, primarily due to the additional, temporary duties that park employees may have during construction of these projects.

Impacts of Alternative B (Preferred Alternative)

Construction of a museum storage facility under the Preferred Alternative will improve access to the collections, which will result in a long-term, minor to moderate, beneficial effect. The curator and his/her staff will have improved access to the collection because it will be consolidated into one building, which will reduce the time/effort needed on the curator's part to locate and work with the artifacts. Adequate and appropriate storage (organization of the collection, proper shelving, etc.) will allow the curator to more easily and efficiently conduct routine maintenance of the artifacts, particularly general housekeeping duties. Dedicated work spaces in the new museum storage facility will provide park staff with sufficient space needed to conduct research, inventory, or cleaning of the historic objects.

Problems associated with the buildings currently used for storage such as exposure to Hanta Virus, rodents, insects, dust, uneven floors, cramped spaces, and poor lighting will not be present in the new building. By eliminating these problems, the new museum storage facility will provide a safer, cleaner environment for the park staff, thereby benefiting park operations to a minor to moderate degree. Further, the new museum storage facility will be handicapped accessible, which will benefit current or future handicapped park staff and researchers.

Following construction of the museum storage facility, relocation of the collection from its current location in various buildings to the new museum storage facility will require additional time commitments on the part of the curator and museum technician. This will result in a temporary, minor, adverse impact to park operations because the curator and museum technician will be dedicated to assisting with the organization and monitoring of the collection relocation/transport to the museum storage facility. The time needed for relocation of the collection will depend on the method of transport chosen (i.e. professional movers, park staff, or a combination of both), and may range from one to eighteen months. Once the objects have been relocated to the new facility, the curator will be responsible for organizing and placing the objects in their appropriate places. Any cleaning, inventory, or repair of objects that takes place during the relocation process will also be the responsibility of the curator. The curator may also supervise the cleaning of the buildings and rooms that were previously

used for storage, including dismantling the Bally building located in the barn. Once the museum storage facility is settled, the curator will resume his/her normal curatorial duties, including housekeeping, inventory, hosting researchers, loaning objects, and circulating the collection in the interpretive areas.

The offices of the curator and the museum technician will be moved to the new museum storage facility for the long-term, which will have both adverse and beneficial effects. Because the museum storage facility is located in the developed zone, away from the offices of other park staff located in the historic district, the relocation of these two offices will physically separate the offices of the curator and museum technician from the other park employees. This physical separation of the curator and museum technician from the other employees will result in minor adverse effects because of increased communication difficulties. However, the offices of the curator and museum technician will still be located relatively nearby, approximately ¼ mile away from the other offices (within walking distance). Communication between the park staff in the central historic district and the curator/museum technician at the museum storage facility will likely be conducted using more electronic-mail and telephone than previously. Despite the minor inconvenience of being located somewhat further away from the other park staff offices, relocating the offices of the curator and museum technician will have a beneficial effect because of the proximity they will have to the collection. With improved access to the consolidated/organized collection, the curator and museum technician will have more time to perform their curatorial duties.

Other changes associated with the proposed action include additional maintenance that is required for a new building. The maintenance division will be responsible for the upkeep of the new museum storage facility, including cleaning the interior/exterior of the building, repairs, minor landscaping, and other maintenance duties. Because the building will be constructed for easy maintenance and sustainability, the increased workload of the maintenance crew will result in a long-term, minor, adverse effect to park operations. The Preferred Alternative will not require any additional employees.

Operation of the museum storage facility will incur additional costs due to the energy, communications, and water requirements of a new building. However, because the museum storage facility will be constructed in a sustainable manner, the costs associated with operation of a new building will be minimized to the extent possible, resulting in a long-term, minor, adverse effect to park operations.

Cumulative Effects: Overall, the majority of past, present, and reasonably foreseeable future projects listed in the cumulative scenario will have negligible impacts on long-term park operations because additional employees will not be needed for these projects; administrative procedures for the National Historic Site will not be affected; and the duties of employees will not be altered. However, during construction of these projects, park employees may be temporarily affected to a minor adverse degree because of additional duties such as monitoring the construction or advising contractors, but these additional duties will be eliminated following construction. The Preferred Alternative is expected to have a temporary, minor, adverse effect on park operations because it will require nearly full-time time commitments of the curator and museum technician to the relocation of the collection from the historic buildings and the organization of the collection in the new museum storage facility. Cumulatively, the temporary, minor, adverse effects of the Preferred Alternative in addition to the temporary, minor, adverse effects to employees during construction of other past, present, and reasonably foreseeable future projects will result in temporary, minor, adverse impacts to park operations during construction of these projects.

Conclusion: The Preferred Alternative will result in a long-term, minor to moderate, beneficial effect to park operations because the curator and museum technician will have improved access to the collections, thereby allowing them to perform their curatorial duties more easily. Short-term, minor, adverse effects to park operations will occur from the time needed for the curator and museum technician to supervise and assist with relocating the collection and organizing it in the new facility and the physical separation of the curator and museum technician from the other employees. The museum storage facility will require additional maintenance and will incur additional costs for energy and water, which will have long-term, minor, adverse effects on park operations. Cumulatively, the Preferred Alternative in addition to other past, present, and reasonably foreseeable future projects will result in short-term, minor, adverse impacts to park operations during construction of these projects.

Visitor Use and Experience

Intensity Level Definitions

Hubbell Trading Post National Historic Site was established to preserve and protect the historic Hubbell complex for the benefit and enjoyment of the public. The collection is an important part of the historic interpretation and understanding of the site. The methodology used for assessing impacts to visitor use and experience are based on how the collections are interpreted and incorporated into the overall visitor experience, and how a new museum storage facility would affect the visitor. The thresholds for this impact assessment are as follows:

- Negligible:** Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. Any effects would be short-term. The visitor would not likely be aware of the effects associated with the alternative.
- Minor:** Changes in visitor use and/or experience would be detectable, although the changes would be slight and likely short-term. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.
- Moderate:** Changes in visitor use and/or experience would be readily apparent and likely long-term. The visitor would be aware of the effects associated with the alternative, and would likely be able to express an opinion about the changes.
- Major:** Changes in visitor use and/or experience would be readily apparent and have substantial long-term consequences. The visitor would be aware of the effects associated with the alternative, and would likely express a strong opinion about the changes.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative will result in negligible to minor adverse effects to visitor use and experience of Hubbell Trading Post National Historic Site. Although the No Action Alternative would not change the interpretation of the site, the existing artifacts on display in the interpretive areas of the National Historic Site would continue to be infrequently rotated, thereby lessening the variety of objects the visitor can experience. Researchers would continue to be required to obtain permission to access the collection (with a park staff escort), and may have difficulty accessing some portions of the collection because of poor storage conditions. Loaning of pieces from the collection to other museum facilities would still occur, but would likely continue to be difficult due to poor storage conditions.

Cumulative Effects: Other past, present, and reasonably foreseeable future actions such as improvements to historic structures in the historic district (parapet repair and HVAC to the visitor center, barn stabilization, and fire system replacement) will provide aesthetic, comfort, and safety enhancements for the visitor, which will result in long-term, minor, beneficial effects to visitor use and experience. The existing storage conditions of the collection under the No Action Alternative have a negligible to minor, adverse effect on visitor use and experience because park staff have difficulties regularly rotating the collection to give variety to the visitor. Researchers are also affected by the poor storage conditions because of unsafe and difficult access to the collection. Cumulatively, the minor, beneficial effects of improvements to historic buildings will help minimize the minor, adverse effects associated with the No Action Alternative; thereby resulting in an overall cumulative negligible to minor beneficial effect to visitor use and experience.

Conclusion: The No Action Alternative will result in negligible to minor, adverse impacts to visitor use and experience due the poor storage conditions of the collection, which results in infrequent circulation of objects from the collection (lack of variety) and difficulties experienced by researchers trying to access the collections. Cumulatively, the No Action Alternative combined with other projects, will have a cumulative negligible to minor beneficial effect on visitor use and experience.

Impacts of Alternative B (Preferred Alternative)

The Preferred Alternative would result in long-term, minor beneficial effects to the visitor use and experience of Hubbell Trading Post National Historic Site because the museum storage facility would allow park staff to more easily access the collections and rotate pieces of the collection in the interpretive areas such as the Hubbell home and trading post. Although the new museum storage facility would not be open to the general public, visitors would benefit from the project because additional museum artifacts could be displayed, thereby allowing visitors to experience greater numbers and types of historic objects associated with the Hubbell homestead.

By relocating the collection to the new facility, additional space in the historic outbuildings would be made available. This space could potentially be used for visitor use and National Historic Site interpretation, although this has not yet been determined. Also, by removing the collection from these outbuildings, park staff will have the opportunity to clean these buildings and try to remove rodents infestation which has Hanta Virus risks. This will improve the overall health and safety of the visitor experience. For these reasons, the Preferred Alternative will have a long-term, minor, beneficial effect on visitor use and experience.

Because researchers will be able to more easily access the collections, and have dedicated work space to examine the objects, the Preferred Alternative is anticipated to enhance their experience in the long-term to a minor degree. Researchers will be allowed to access the collection in the museum storage facility during normal hours of operation, upon permission of the superintendent and curator. The curator or designated park employee will escort the researcher around the museum storage facility to locate the objects of request. The museum storage facility will also be handicapped accessible which will provide access to the collection by handicapped researchers, who before would not have been able to access the collection.

The Preferred Alternative will likely promote a better understanding of the collection because park staff and researchers will have access to objects that were previously inaccessible or difficult to access. Further study and examination of these objects will enhance the understanding of these objects and the overall collection and historic site. With the potentially increased knowledge and understanding of the collection, interpretation of the site will be enhanced, thereby resulting in a long-term, minor beneficial effect to visitor use and experience.

The loan program will benefit from the Preferred Alternative to a minor degree because park staff will have improved access to the collection, thereby making it easier to locate objects to loan to other museum facilities or institutions. Improved storage at Hubbell Trading Post National Historic will promote better preservation of the collection, which will prolong the life of the objects that are loaned to other institutions.

Construction of the museum storage facility will result in short-term, minor, adverse effects to visitor use and experience because of additional noise, dust, and fumes, and changes to the viewshed. The construction zone including the staging and stockpiling areas will be visible from the entrance to the National Historic Site, and would be one of the first things visitors see when entering the park. This may diminish the initial experience of the park visitor. Noise associated with construction will likely be heard by park visitors which may be disruptive or detract from the quiet historic experience. Also, dust and fumes generated by construction would diminish the visitor experience; however, dust and fumes from construction of the museum storage facility will likely be more localized in the construction zone (near the National Historic Site entrance) and not greatly affect visitors in the historic district. Mitigation measures including dust suppression are designed to minimize these temporary, minor, adverse effects on visitor use and experience, and pre-construction conditions are expected to resume following construction.

Following construction of the museum storage facility, relocation of the artifacts will result in short-term, minor, adverse effects to visitor use and experience. The transport of objects from the historic district to the new museum storage facility in the developed zone will likely entail use of motor vehicles making trips back and forth (although the exact method has not yet been determined). The dust and fumes generated by vehicles transporting the objects between the historic district and developed

zone, in addition to the additional traffic of this vehicle(s) making trips back and forth will diminish the visitor experience. Loading and unloading the collection will detract from the visitor experience because visitors will be distracted by the project. Moving the collections will not entail closing any interpretive areas that are currently open to visitors.

Cumulative Effects: Other past, present, and reasonably foreseeable future actions such as improvements to historic structures in the central historic district (parapet repair and HVAC to the visitor center, barn stabilization, and fire system replacement) will provide aesthetic, comfort, and safety enhancements for the visitor, which will result in long-term, minor, beneficial effects to visitor use and experience. The Preferred Alternative will improve visitor use and experience to a minor degree because it will allow park staff to more easily rotate the collections in the interpretive areas; improve the accessibility of the collection for researchers and the loan program; and may promote a better understanding of the objects in the collection and more broadly the entire site. Construction of the museum storage facility and relocation of the collection to the new building will impact visitor use and experience to a short-term, minor, adverse degree due to additional noise, dust, and fumes, and altered viewsheds that will detract from the quiet, historic experience. Cumulatively, the minor, beneficial effects of improvements to historic buildings listed in the cumulative scenario in addition to the minor, beneficial effects of the Preferred Alternative will result in long-term, minor to moderate, beneficial effects to visitor use and experience.

Conclusion: The Preferred Alternative will result in long-term, minor, beneficial effects to visitor use and experience for a number of reasons including a greater variety of historic objects displayed in the interpretive areas and available for the loan program; improved access to the collections by researchers; and a better understanding of the objects in the collection. The Preferred Alternative will also result in short-term, minor, adverse impacts as a result of constructing the museum storage facility and relocation of the collection to the new facility, including increased noise, dust, and fumes. Construction-related impacts will be temporary, and will dissipate following construction. Cumulatively, the Preferred Alternative in addition to other past, present, and reasonably foreseeable future actions will have long-term, minor to moderate, beneficial effects to visitor use and experience.

Visual Resources

Intensity Level Definitions

Preservation of visual resources is important to retaining the historic setting/feeling and visitor experience at Hubbell Trading Post National Historic Site. The rural, historic character of the landscape are key elements in the visual setting at the park. The methodology for assessing impacts to visual resources has been established based on these key elements, and is defined as follows:

Negligible:	The impact to visual resources is at the lowest levels of detection, barely perceptible and not measurable.
Minor:	The impact to visual resources would be noticeable, but would not alter the feeling, character, or setting associated with the viewshed of or from the park.
Moderate:	The impact to visual resources would be more noticeable, and may alter the feeling, character, or setting associated with the viewshed of or from the park.
Major:	The impact to visual resources would be readily apparent, and would alter the feeling, character, or setting associated with the viewshed of or from the park.
Impairment:	A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of (park name); (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Impacts of Alternative A (No Action Alternative)

The No Action Alternative will have negligible effects on the visual resources associated with Hubbell Trading Post National Historic Site. The museum storage facility would not be constructed, and this area would remain as it currently exists, thereby not changing the visual setting.

Cumulative Effects: Development along State Highway 264 and on the Navajo reservation has resulted in the construction of buildings and structures that are visible from Hubbell Trading Post National Historic Site. The introduction of new buildings into the broader historic landscape of the National Historic Site and its surroundings has had a minor to moderate, adverse, effect to the park's historic setting and natural night sky. Other projects including renovations of historic buildings within the National Historic Site (barn stabilization and parapet repair to the visitor center) will enhance the visual setting of the historic district to a minor degree. Cumulatively, the negligible effects of the No Action Alternative, in addition to the minor beneficial effects of building renovation within the National Historic Site and the development on the Navajo Nation outside the park, will result in a combined minor to moderate, adverse effect on the visual resources and historic setting at Hubbell Trading Post National Historic Site.

Conclusion: The No Action Alternative will result in negligible effects to the visual resources of Hubbell Trading Post National Historic Site because the museum storage facility would not be constructed. Cumulatively, the No Action Alternative in addition to other past, present, and reasonably foreseeable future projects will have a minor to moderate, adverse effect on the visual resources of the National Historic Site, primarily due to the construction of buildings outside the National Historic Site on the Nation which are visible from the National Historic Site. Because the project will not result in major, adverse impacts to the visual resources at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

Impacts of Alternative B (Preferred Alternative)

The proposed location for the museum storage facility is on an already disturbed parcel of land in the developed zone of Hubbell Trading Post National Historic Site, and will not affect the historic or natural setting of this area. The museum storage facility will not be located in the viewshed of the historic district (i.e., one cannot see the museum storage facility from the historic district, or vice versa); therefore, the Preferred Alternative will have negligible impacts to the visual resources of the primary historic setting of the National Historic Site. Further, because this area is already developed, the Preferred Alternative will not alter an undisturbed, natural setting.

Other viewsheds will be altered by the introduction of a new building into the developed zone of the National Historic Site, which will result in negligible to minor adverse impacts to the visual resources of this area. The museum storage facility will be visible from the National Historic Site entrance road, and will be one of the first buildings that visitors see when arriving at the National Historic Site. However, because this is the developed zone of the National Historic Site that is already disturbed and contains newer buildings, this will be a long-term negligible to minor adverse effect to those entering the park and viewing the building.

The museum storage facility will also be visible from Navajo Route 3 (State Highway 264) and the nearby portions of the Navajo Nation. Because development in these areas has occurred in recent times and continues to occur, the introduction of a new building in the National Historic Site will have a negligible effect to the visual resources of these areas because these areas are continually being developed.

Finally, the museum storage facility will be directly visible from approximately two or three National Historic Site residences and the park maintenance building located in the developed zone. For the two or three residences, the construction of a new building will obstruct and change the existing viewshed which will have a minor adverse impact to those residents. The view from the back of these residences is currently of the maintenance facility, so the introduction of an additional building will not block a pristine viewshed or alter the function of the residences, but it will modify the existing landscape to a degree that the residents will notice a change in their surroundings. For the park staff who use the maintenance building, the change in visual resources will result in a minor adverse effect because there will be a noticeable change in the viewshed from the introduction of a new building.

Mitigation measures will be employed to minimize the impacts to visual resources, particularly the viewsheds of the adjacent residences. The museum storage facility will be constructed with exterior treatments that are similar to the existing residences, so as to blend with the existing developed setting. Landscaping and revegetation of disturbed areas and areas immediately adjacent to the museum storage facility will take place following construction. Landscaping will be designed to minimize the visual intrusion of the structure, and to blend with the existing setting. Lighting on the exterior of the building will be minimal and intended for safety purposes, so as to not affect the natural night sky or nearby residents.

Cumulative Effects: Development along State Highway 264 and on the Navajo Nation has resulted in the construction of buildings and structures that are visible from Hubbell Trading Post National Historic Site. The introduction of new buildings into the broader historic landscape of the National Historic Site and its surroundings has had a minor to moderate, adverse effect to the National Historic Site's historic setting and natural night sky. Other projects including renovations of historic buildings within the National Historic Site (barn stabilization and parapet repair to the visitor center) will enhance the visual setting of the historic district to a minor degree. Cumulatively, the negligible to minor, adverse effects of the Preferred Alternative, in addition to the minor beneficial effects of building renovation within the National Historic Site and the minor to moderate adverse effects of development on the Navajo Nation outside the park, will result in a combined minor to moderate, adverse effect on the visual resources and historic setting at Hubbell Trading Post National Historic Site.

Conclusion: The Preferred Alternative will have negligible effects on the viewshed from/to the historic district of the National Historic Site because it will not be visible from this area. Construction of a museum storage facility will also have negligible to minor adverse effects on the visual resources associated with maintenance facility of the National Historic Site, the entrance road to the National Historic Site, State Highway 264, and the adjacent portions of the Navajo Nation because these areas are already developed, and the introduction of a new building into a developed area will not affect the visual setting. The Preferred Alternative will alter the viewsheds of the adjacent residences located in the developed zone of the National Historic Site because these residences will have direct views of the new building. This, however, is a minor, adverse impact because the views from these residences is already of the developed zone. Because the project will not result in major, adverse impacts to the visual resources at Hubbell Trading Post National Historic Site, there would be no impairment of the park's resources or values.

CONSULTATION/COORDINATION

Public and Agency Scoping

Initial project scoping was conducted to inform various agencies and the public about the proposal to construct a museum storage facility at Hubbell Trading Post National Historic Site, and to elicit comments, issues, and concerns with regards to the project. The following actions were taken on part of the National Park Service as part of the public scoping process for this Environmental Assessment/Assessment of Effect, as listed by date:

- **Section 106 Consultation/Tribal Consultation Letters, February 10, 2002** – A formal letter was submitted to the Navajo Nation Historic Preservation Department describing the project and initiating Section 106 consultation for historic properties (Appendix A). No response was received. To initiate Native American consultation, this same letter was also submitted to affiliated tribal entities, as listed below. No comments were received from any of these tribal entities. Finally, this letter was also sent to the Advisory Council on Historic Preservation, and no response was received.
- **Press Release for Scoping, August 28, 2002** – A press release describing the proposed action and the Environmental Assessment/Assessment of Effect was issued by means of direct mailing to the list of stakeholders, affiliated tribes, and interested parties that the National Historic Site maintains, in addition to posting the press release at the National Historic Site's visitor center (Appendix B). With this press release, the public was given 30 days to comment on the project from August 28 to September 28, 2002. During this time, one comment on the project was received from the Pueblo of Laguna. This comment stated support for the proposed museum storage facility, and included a request that they be kept informed of the project.
- **Combined NEPA/Section 106 Letter, September 6, 2002** – A formal letter was submitted to the Navajo Nation Historic Preservation Department and the Advisory Council on Historic Preservation to inform them that the preparation of this Environmental Assessment/Assessment of Effect would also be used to comply with Section 106 of the National Historic Preservation Act, in the form of a combined document entitled an Environmental Assessment/Assessment of Effect (see Appendix A).

Internal Scoping

Internal scoping for the development of alternatives for this project was conducted through a Value Analysis Study. A team comprised of National Park Service technical experts including engineers, planners, and various park staff met in Spring/Summer 2001 to conduct the Value Analysis Study. Objectives of this study were to review project needs and functions to respond to management issues; develop solutions (alternatives) to achieve essential functions at the lowest life-cycle cost consistent with the required performance, sustainability, quality, and safety; determine possible site locations and building layouts; and develop design requirements including building materials and systems. A report entitled Planning and Value Analysis Study for Museum Storage Facility was prepared that consolidated all of this information, and provided much of the background information used in the *Purpose and Need* and *Alternatives Considered* chapters of this Environmental Assessment/Assessment of Effect (NPS 2001).

Internal scoping was also conducted for the development of the Environmental Assessment/Assessment of Effect for this project. A team of park staff including the superintendent, the park curator, the chief park ranger, and a NEPA/106 specialist met in July 2002 to review alternatives, develop project objectives, gather background information, brainstorm potential impacts, and discuss public outreach for the project. The results of this meeting are documented in this Environmental Assessment/Assessment of Effect.

List of Agencies, Tribes, and Individuals Contacted

The following list of persons, organizations, tribes, and agencies were contacted for information; assisted in identifying important issues; and/or were notified of the proposed project to construct a museum storage facility at Hubbell Trading Post National Historic Site.

Navajo Nation Entities

Navajo Nation Historic Preservation Department
Navajo Nation Department of Fish and Wildlife, Division of Natural Resources

Federal Agencies

Advisory Council on Historic Preservation
Natural Resources Conservation Service

Affiliated Native American Groups

- | | |
|--|---|
| • Governor Regis Pecos, Cochiti Pueblo | • Governor Denny Gutierrez, Pueblo of Santa Clara |
| • President Roger Vicente, Jicarilla Apache Tribe | • Governor William Torivio, Pueblo of Zia |
| • Governor Cyrus J. Chino, Pueblo of Acoma | • Governor Ramon C. Garcia, Pueblo of Santo Domingo |
| • Governor Lawrence Troncosa, Pueblo of San Felipe | • Chairman Wayne Taylor, Hopi Tribe |
| • Governor Perry Martinez, Pueblo of San Ildefonso | • Governor Harry Early, Pueblo of Laguna |

- Governor Alvino Lucero, Pueblo of Isleta
- Governor Clarence Chile, Pueblo of Picuris
- Governor Stuart Paisano, Pueblo of Sandia
- Governor Nelson J. Cordova, Pueblo of Taos
- Acting Chairman Vida Peabody, Southern Ute Indian Tribe
- Governor Joe V. Cajero, Jemez Pueblo
- President Kelsey Begaye, Navajo Nation
- Governor David Perez, Pueblo of Nambe
- Governor Jacob Viarrial, Pueblo of Pojoaque
- Governor Bruce Sanchez, Pueblo of Santa Ana
- Governor Charlie Dorame, Pueblo of Tesuque
- Governor Malcolm Bowekaty, Pueblo of Zuni
- Chairman Ernest House, Ute Mountain Tribe
- Celestino Gachupin, Pueblo of Zia
- Rick Quezada, Ysleta del Sur Pueblo
- Leigh Kuwanwisiwma, Hopi Cultural Preservation Office
- Victor Sarracino, Laguna Pueblo
- Herman Agoyo, Pueblo of San Juan
- Jenny Holmes, Pueblo of Sandia
- Jicarilla Cultural Center, Jicarilla Apache Tribe
- Governor Wilfred Garcia, Pueblo of San Juan
- Tony Herrera, Cochiti Pueblo
- Richard Mermejo, Pueblo of Picuris
- Mark Mitchell, Pueblo of Tesuque
- William Whatley, Jemez Pueblo
- President Sara Misquez, Mescalero Apache Tribe
- Petuuche Gilbert, Pueblo of Acoma
- Ben Lucero, Pueblo of Isleta
- Charlie Tapia, Pueblo of Pojoaque
- Myron Gonzales, Pueblo of San Ildefonso
- Alan Downer, Navajo Nation HPD
- Dan Simplicio, Pueblo of Zuni
- Howard Richards, Southern Ute Tribe
- Reva Suazo, Pueblo of Taos

Public Review of Environmental Assessment/ Assessment of Effect

The Environmental Assessment/Assessment of Effect will be released for public review in April 2003. To inform the public of the availability of the Environmental Assessment/ Assessment of Effect, the National Park Service will publish and distribute a letter or press release to agencies, tribes, and members of the public on the National Historic Site's mailing list, as well as the local newspaper. A copy of the Environmental Assessment/ Assessment of Effect will be mailed to those recipients listed below, and will also be available for review at various repositories during the comment period including the National Historic Site's visitor center; on the internet at www.nps.gov/hutr; or by request.

The Environmental Assessment/Assessment of Effect is subject to a 30-day public comment period from April 30 to May 30, 2003. During this time, the public is encouraged to submit their written comments to the National Park Service address provided at the beginning of this document. Following the close of the comment period, all public comments will be reviewed and analyzed, prior to the release of a decision document. The National Park Service will issue responses to substantive comments received during the public comment period, and will make appropriate changes to the Environmental Assessment/ Assessment of Effect, as needed.

List of Recipients

Copies of the Environmental Assessment/Assessment of Effect were mailed to the Navajo Nation Historic Preservation Department; the Navajo Nation Department of Fish and Wildlife, Division of Natural Resources; and the Pueblo of Laguna. Upon submission of the Environmental Assessment/ Assessment of Effect to the Navajo Nation Historic Preservation Department, concurrence was requested regarding the *No Adverse Effect* determinations for historic sites (the National Historic Landmark) and the cultural landscape. A letter or press release was distributed to Native American tribes, stakeholders, and other interested members of the public on the National Historic Site's mailing list. Copies of the Environmental Assessment/ Assessment of Effect will be provided to interested individuals, upon request. As described above, copies will also be available for review at the visitor center and on the internet.

List of Preparers

Preparer:

- Cheryl Eckhardt, NEPA/106 Specialist, National Park Service, Intermountain Region Support Office, Denver, Colorado

Consultants:

- Nancy Stone, Superintendent, National Park Service, Hubbell Trading Post National Historic Site, Ganado, Arizona
- Ed Chamberlin, Curator, National Park Service, Hubbell Trading Post National Historic Site, Ganado, Arizona

REFERENCES

- ESM 2002 *A Survey for the Federally Endangered Southwestern Willow Flycatcher (Empidonax traillii extimus), Hubbell Trading Post National Historic Site, Ganado, Arizona*, prepared for the National Park Service, prepared by EnviroSystems Management, Inc. (ESM), July 29, 2002.
- NNDFWL 2002 Telephone conversation on September 16, 2002 between John Nystedt, biologist at Navajo Nation Department of Fish and Wildlife and Nancy Stone, superintendent at Hubbell Trading Post National Historic Site regarding special status species within the project area. John verified that the list of species from NNDFWL issued to Hubbell Trading Post National Historic Site for a recent project to remove exotic species along the Pueblo Colorado would be sufficient for the museum storage facility project. This letter is dated January 8, 2002, and states that no species of concern occur at the project site.
- NPS 1958 *National Survey of Historic Sites and Buildings for Hubbell Trading Post*, Form 10-317, recommendation for classification based on exceptional value, prepared by Robert M. Utley, January 9, 1958.
- NPS 1961 *National Survey of Historic Sites and Buildings for Hubbell Trading Post*, Form 10-137, survey form, prepared by Aldus H. Schroeder, Archeologist, prepared December 13, 1961.
- NPS 1969 *Master Plan, Hubbell Trading Post National Historic Site, Arizona*, prepared by United States Department of the Interior, National Park Service, April 1969, approved March 28, 1972.
- NPS 1975 *Collection Management Plan for Hubbell Trading Post National Historic Site*, prepared by Division of Museum Services, Harpers Ferry Center, July 1975.
- NPS 1979 *Assessment of Alternatives for Development Concept Plan, Hubbell Trading Post National Historic Site, Arizona*, prepared by the Denver Service Center, National Park Service, U.S. Department of the Interior, March 1979.
- NPS 1980 *Development Concept Plan, Hubbell Trading Post National Historic Site, Arizona*, prepared by the Denver Service Center, National Park Service, U.S. Department of the Interior, August 1980.
- NPS 1983 *Soil Erosion Study, Hubbell Trading Post National Historic Site, Ganado, Arizona*, prepared by Earth Technology Corporation, 1983.
- NPS 1986 *Statement for Management, Hubbell Trading Post National Historic Site, Ganado, Arizona*, prepared by Hubbell Trading Post National Historic Site with assistance from the Southwest Regional Office, National Park Service, Sante Fe, New Mexico, January 1986.
- NPS 1989 *National Register of Historic Places Registration Form for Hubbell Trading Post*, prepared by Boyd C. Pratt, consulting architectural historian, August 30, 1989.
- NPS 1993 *Hubbell Trading Post National Historic Site, An Administrative History*, prepared by Albert and Ann Manchester, for the National Park Service, Division of History, Southwest Cultural Resources Center, Sante Fe, New Mexico, Professional Papers No. 46, 1993.
- NPS 1998 *Cultural Landscape Report: Hubbell Trading Post National Historic Site, Ganado, Arizona*, prepared by Peggy Froeschauer-Nelson, National Park Service, Intermountain Support Office, Cultural and National Register Programs, Sante Fe, New Mexico, 1998.
- NPS 1999 *Hubbell Trading Post Official Map and Guide*, brochure produced by the National Park Service, US Department of the Interior, printed in 1990 by the Government Printing Office.
- NPS 2000a *2001-2005 Strategic Plan, Hubbell Trading Post National Historic Site*, prepared by HUTR GPRA Task Force, National Park Service, 2000.
- NPS 2000b *Management Policies*, National Park Service, U.S. Department of the Interior, December 2000.
- NPS 2002 Various species reports from the Inventory and Monitoring Program, including plants, mammals, birds, and reptiles/amphibians. These lists indicate that many of these lists were developed or updated based on species recorded during 2002 surveys.
- NPS 2001 *Planning and Value Analysis Study for Museum Storage Facility, Hubbell Trading Post National Historic Site*, prepared by National Park Service, Intermountain Support Office, Denver, June 18, 2001.
- NPS 2003 *Level II Cultural Landscape Inventory for Hubbell Trading Post National Historic Site*, prepared by Julie Galbraith, Intermountain Support Office, Cultural Landscapes Program, National Park Service, Sante Fe, New Mexico, January 27, 2003.

NRCS 2002	Telephone conversation on November 15, 2002 between Dan Bloedel, District Conservationist at Natural Resources Conservation Service, and Jeremy McClain, student, regarding prime and unique farmlands.
Utley 1959	<i>Summary and Evaluation for Hubbell Trading Post</i> , prepared by Robert Utley, historian, January 1959.
Zimmerman 2002	<i>A Cultural Resources Inventory for a Reforestation Project and Storage Building Construction at Hubbell Trading Post National Historic Site, Apache County, Arizona</i> , prepared by David Zimmerman, Archeologist, prepared for Hubbell Trading Post National Historic Site, submitted to Edward Chamberlin, Curator, Hubbell Trading Post National Historic Site, May 2002.

APPENDIX A: SECTION 106 AND NATIVE AMERICAN CONSULTATION LETTERS



United States Department of the Interior

NATIONAL PARK SERVICE
HUBBELL TRADING POST NATIONAL HISTORIC SITE
P.O. Box 150
Ganado, AZ 86505
928-755-3475

IN REPLY REFER TO:
H4217 (HUTR)

February 10, 2002

Alan Downer
Director of the Navajo Nation Historic Preservation Department
P.O. Box 4950
Window Rock, AZ 86505

Dear Director Downer,

Reference: Hubbell Trading Post National Historic Site, New Museum Storage Facility

Subject: Compliance with Section 106 of the National Historic Preservation Act and National Environmental Policy Act (NEPA)

The National Park Service is developing plans to construct a new museum storage facility at Hubbell Trading Post National Historic Site. The new 5500 square foot building will be located in the maintenance complex near the employee housing area, outside the cultural landscape. The project will improve the storage condition for nearly 66,000 artifacts and greatly improve access to the museum collection for researchers and visitors. Schematics have been provided to Ron Muldanado of the Cultural Resource Compliance Section, and the park has discussed the project with him informally on several occasions so he is familiar with our progress.

As you are aware, Hubbell Trading Post NHS is on the National Register of Historic Places and the museum artifacts are identified in the park's enabling legislation as an integral part of the historic site.

In accordance with NEPA and 36 CFR 800 requirements, we have begun the process of consultation with your department and welcome any comments as we proceed. An Environmental Assessment will be prepared by our Denver Office of Planning and Environmental Quality and will be sent to you for comment.

If you have questions or need additional information, please contact me at the address above, through my email address, nancy_stone@nps.gov, or by telephone at 928-755-3475. You may also contact the park Curator, Edward Chamberlin at 928-755-3475 ext. 27.

If you care to view the site, we would be pleased to show you anytime at your convenience. We look forward to your input on this project.

Sincerely,
/s/
Nancy Stone
Superintendent

Identical letter sent to Native American tribes, as listed previously, and the Advisory Council on Historic Preservation.



United States Department of the Interior

NATIONAL PARK SERVICE
HUBBELL TRADING POST NATIONAL HISTORIC SITE
P.O. Box 150
Ganado, AZ 86505
928-755-3475

September 6, 2002

Alan Downer, Director
Navajo Nation Historic Preservation Department
P.O. Box 4950
Window Rock, AZ 86505

Dear Director Downer:

The National Park Service proposes to construct a museum storage facility at Hubbell Trading Post National Historic Site to house nearly 66,000 artifacts associated with the historic trading post and the Hubbell homestead. These items are currently being stored in various inadequate facilities around the park that have insufficient or no lighting, lack of fire suppression mechanisms, and no climate controls. These poor conditions have resulted in artifact deterioration, and have made routine inventory, examination, and preservation of the collection difficult to achieve.

The park requested that I prepare an environmental assessment (EA) for the proposed project. Preparation of an EA is necessary to meet the requirements of the National Environmental Policy Act. In addition, the process and documentation required for preparation of the EA will be used to comply with §106 of the National Historic Preservation Act. In accordance with section 800.8(c) of the Advisory Council on Historic Preservation's regulations (36 CFR Part 800), I am notifying your office in advance of the park's intention to use the EA to meet its obligations under §106.

If you should have any questions, please contact me at (303) 969-2851 or Cheryl Eckhardt, NEPA/Section 106 Specialist at (303) 969-2851.

Sincerely,

/s/

Nancy Stone
Superintendent

cc: Jane Crisler, Advisory Council on Historic Preservation
Cheryl Eckhardt, NEPA/Section 106 Specialist

APPENDIX B: SCOPING PRESS RELEASE



National Park Service
U.S. Department of the Interior

Hubbell Trading Post National Historic Site
P.O. Box 150
½ Mile West of Highway 191 on Highway 264
Ganado, AZ 86505-0150

Press Release

Subject: Environmental Assessment for Museum Storage Facility

Contact: Nancy Stone, Superintendent

Phone: (928) 755-3475

Date: April 22, 2003

The National Park Service is planning to construct a new museum storage facility at Hubbell Trading Post National Historic Site to house nearly 66,000 artifacts associated with the historic trading post and the Hubbell homestead. These items are currently being stored in various inadequate facilities in the park that have insufficient or no lighting, lack of fire suppression mechanisms, and no climate controls. These poor conditions have resulted in artifact deterioration, and have made routine inventory, examination, and preservation of the collection difficult to achieve.

To minimize the deterioration of artifacts, and to consolidate the collection, the National Park Service proposes to construct a roughly 5,500 square-foot, one-story museum storage facility in the developed zone of the park, outside of the historic district. The building will provide sufficient storage space for the collection, in addition to employee offices and a laboratory. The new climate-controlled facility will reduce artifact deterioration and a security system will provide theft prevention. The artifacts currently in storage at the park will be relocated to the completed building. Once in the new building, park staff will find it easier to inventory, examine, clean, and provide comprehensive access to the collection.

In addition to minimizing artifact deterioration, the project will provide park staff and researchers convenient access to the collection. This improved access will make it easier for routine maintenance and research, and allow park staff to periodically rotate and display certain objects of the collection in the trading post, Hubbell home, barn and in the barnyard. Also, by relocating the collection, the space in the historic district formally occupied by Curation and the museum storage will be made available for other uses including visitor services and park operations. Although the museum storage facility will not be open to the general public, park staff will take special requests for members of the public to view the facility.

The Environmental Assessment for constructing the museum storage facility is currently available for review. This EA is one of the steps in the process required by the National Environmental Policy Act (NEPA). The EA provides a decision-making framework that 1) analyzes a reasonable range of alternatives to meet project objectives, 2) evaluates potential issues and impacts to park resources and values, and 3) identifies mitigation measures to lessen the degree or extent of these impacts.

The National Park Service encourages public participation in the Environmental Assessment process. You may review the EA on-line at www.nps.gov/hutr or you may request a copy from the Park Superintendent, at 928-755-3475. If you have any comments regarding this environmental assessment, please submit them in writing to the Park Superintendent. Your comments are valuable in the preparation of a thorough Environmental Assessment. Please provide all comments by May 30, 2003 to:

Nancy Stone, Superintendent
Hubbell Trading Post National Historic Site
P.O. Box 150
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